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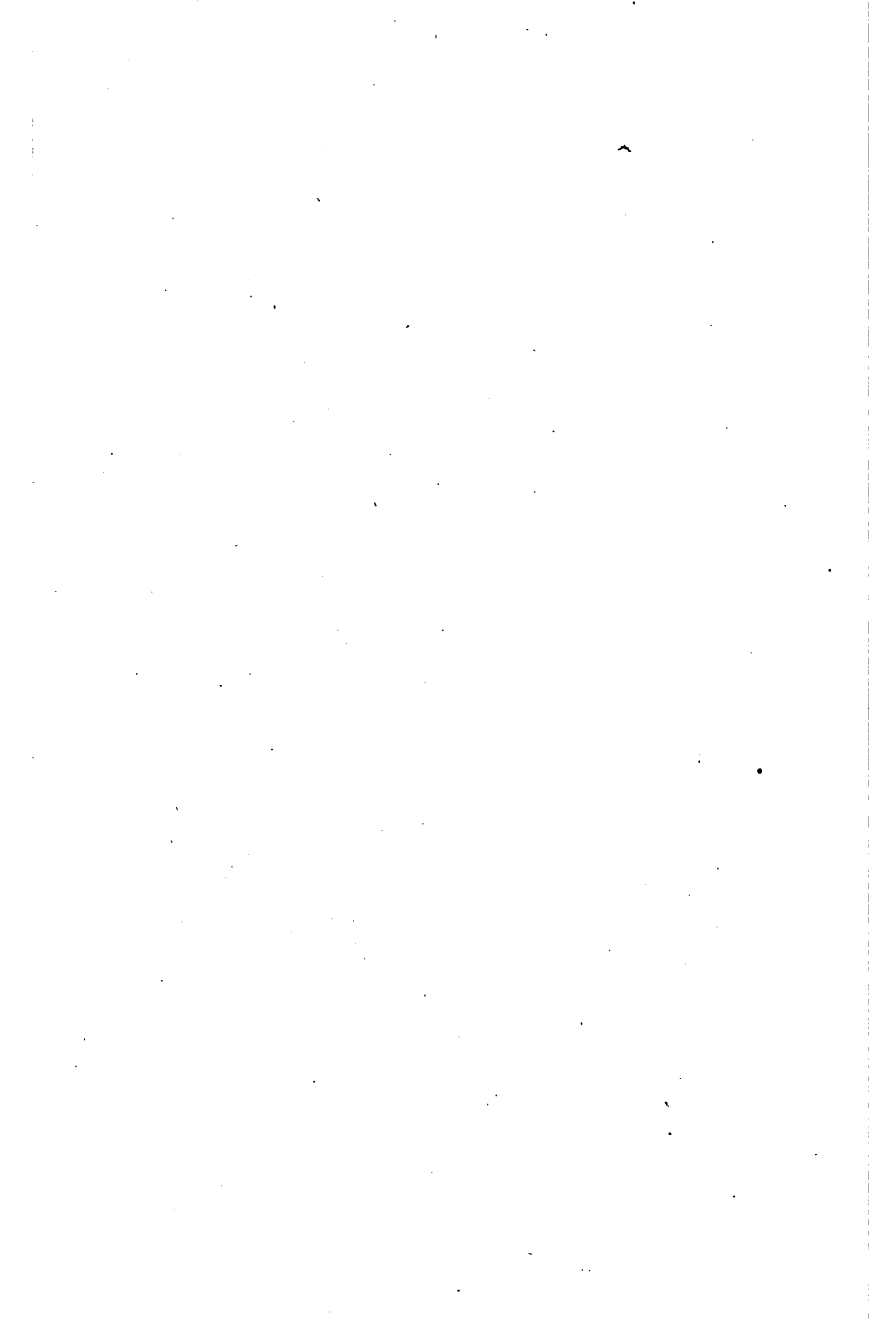
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CITY, STATE, AND NATION



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CITY, STATE, AND NATION

A TEXT BOOK ON CONSTRUCTIVE CITIZENSHIP
FOR ELEMENTARY SCHOOLS AND
JUNIOR HIGH SCHOOLS

BY

WILLIAM L. NIDA

SUPERINTENDENT OF SCHOOLS, RIVER FOREST, ILLINOIS
AUTHOR OF "THE DAWN OF AMERICAN
HISTORY IN EUROPE," ETC.

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THE OATH TAKEN BY THE BOYS OF OLD ATHENS
WHEN THEY WERE ADMITTED TO THE ARMY

“WE SHALL NEVER BRING DISGRACE TO THIS, OUR CITY, BY ANY ACT OF DISHONESTY OR COWARDICE, NOR EVER DESERT OUR SUFFERING COMRADES IN THE RANKS. WE WILL FIGHT FOR THE IDEALS AND SACRED THINGS OF THE CITY, BOTH ALONE AND WITH MANY. WE WILL REVERE AND OBEY THE CITY'S LAWS AND DO OUR BEST TO INCITE A LIKE RESPECT AND REVERENCE IN THOSE ABOVE US WHO ARE PRONE TO ANNUL OR TO SET THEM AT NAUGHT. WE WILL STRIVE UNCEASINGLY TO QUICKEN THE PUBLIC'S SENSE OF CIVIC DUTY. THUS, IN ALL THESE WAYS, WE WILL TRANSMIT THIS CITY NOT ONLY NOT LESS, BUT GREATER, BETTER, AND MORE BEAUTIFUL THAN IT WAS TRANSMITTED TO US.”

PREFACE

THE education of all American youth at public expense is usually justified on the ground that school training will make them better citizens and more faithful and loyal servants of the state. The state will therefore be perpetuated and the public welfare enhanced.

From this point of view it would seem that training in some sort of civics or citizenship should have a definite and prominent place in all grammar and high school curricula. This is, however, far from being a fact. Some of the best schools have no definite civics course whatever. The reason for this, the author believes, is not that teachers do not desire to give special training in citizenship, but that no suitable and teachable texts for young people have yet appeared. There are, it is true, scores of treatises on government; but to the immature mind they are dull and lifeless — mere analyses of governmental forms. Such discussions are utterly beyond the experience of children and are therefore unintelligible.

Rather than waste the pupil's time with bare memory facts, many superintendents have banished the subject from the course, preferring to teach the elements of good citizenship incidentally. This has proved so unsatisfactory that there is to-day a growing demand for something teachable, tangible, and constructive on real citizenship.

This volume endeavors to look at government from the youth's point of view, putting the problems and needs of society prominent and foremost, and from these working to their solution through the government. This method is

believed to be pedagogical, interesting, and stimulating to young people, not only inculcating lessons in patriotism, but, at the same time, developing the mental faculties with the live, practical problems with which society is wrestling to-day.

Many of these chapters have been tried out in our classes, and the way they have been received abundantly justifies our faith in this sort of civics.

WILLIAM L. NIDA.

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CITY, STATE, AND NATION



CITY, STATE, AND NATION.

CHAPTER I

THE CITY, A PROBLEM

City Growth in the Past Century. — The marvelous way in which cities are growing to-day is a movement of the last century. In no other age of the world's history have cities shown one half the rapid growth that is seen to-day in every civilized land. It is not uncommon in the growing suburbs of large cities to read advertisements such as: "Three more miles of new homes." Acres and sections of ground that were a short time ago open green fields are now covered with rows of buildings packed closely together.

In the year 1800 there were in the United States only six cities with a population of 8000 inhabitants or more; there are now about six hundred, among which are some of the largest cities of the world. A hundred years ago a little more than three per cent of the population of the United States lived in towns of 8000 or more. In 1910 a third of the ninety millions were packed into cities of more than 25,000 each. During the last fifty years the proportion of city dwellers has increased to more than forty per cent. Twelve per cent of all Americans now live in New York, Chicago, and Philadelphia.

Recently there died in Chicago a man who was the first white child born in the city. At the time of his birth there were, besides Fort Dearborn, only five houses in Chicago.

During his life of eighty-five years he saw the city grow from less than one hundred souls to a population of more than two millions of people.



Original owned by Chicago Historical Society.
Chicago in 1834.

The Movement World-wide. — This amazing growth of cities is not confined to the United States nor to the western continent. Throughout the world the cities have made a tremendous growth in the last century. In the forty years between 1850 and 1890 Berlin grew more rapidly than New York. Paris and St. Petersburg are each five times as large as they were a hundred years ago. Bombay, Tokio, and Cairo have likewise grown wonderfully in recent times. London is nearly two thousand years old, yet four fifths of its growth was added during the last century. From every continent cities may be chosen to illustrate this world-wide movement of people to the cities.



The Heart of Chicago.

Underlying Causes. — City life is more attractive than country life to most people. The chief reason for this is that man is a social being; he likes the company of his fellows. Moreover, the city has many conveniences that the country lacks, such as clean, hard streets, gas, and electric lights; especially have the modern electric light, splendid fire department, and the city water supply systems influenced city growth. Wages in the city are usually better, and working hours are shorter. There are more amusements, superior educational advantages, more opportunities to amass riches, more excitement, more pleasure, more life.

There are, however, several deeper reasons for the recent

great increase in city population. One of these is the use of machinery in agriculture. It is said that four laborers with improved farm tools can now do the work formerly done by fourteen men. Before the reaper was invented it took three hours of labor for every bushel of wheat raised, while to-day each bushel averages ten minutes of labor. Since the world can only consume about so much food, a



Courtesy of International Harvester Co.

A Binder doing the Work of Ten Men.

large proportion of farmers have been forced to abandon farming and seek some other livelihood in a city or a town. The more improvements there are in agricultural machinery, the more food one farm laborer can produce, and the fewer men are needed to feed the world.

Another cause of the modern city's growth is the use of machinery instead of muscular power in manufactures. Steam engines and numerous other inventions have made many changes. Factory towns have sprung up and workmen have flocked thither to operate the machinery which makes the thousand and one things the world needs.

Strange as it may seem, while it lessened the number needed on farms, machinery increased the proportion of workmen needed in manufacturing. The explanation is that there seems to be a limit to the amount of foodstuff the world can use; but articles of furniture, clothing, hardware, books, and luxuries find an unlimited demand. As the world advances in education and culture and wealth,



Courtesy of B. & O. Railroad.

Bringing Food and Other Supplies to the Cities. Baltimore & Ohio Railroad.

there is an increased demand for such luxuries and conveniences. Machinery has so reduced the cost of all these things as to bring them within the reach of nearly every one. Since factories are growing larger all the time, there is a need for more workmen to operate the machinery, and this swells the town population.

The Influence of Transportation Facilities. — A third reason for the growth of modern cities is the quick transportation furnished by the railroads. It is now a simple matter to transport food enough for the millions of people gathered together in one city. In the old days famines

occurred in one land when grain was rotting on the ground not a hundred miles away. It was almost impossible in those times to supply a large city with food, water, and fuel. Machinery and the railroads have changed all this, for the steamship and locomotive now transport food from one end of the world to the other.

The electric cars have played an important part in the making of great cities, since they carry people to and from their work and enable the city factories to draw their workmen from a wider city limit. The slowness of horse cars compelled the workman to live near his work, thus preventing the spreading of the population. The steam car was not practicable on city streets, but the trolley was a great success from the first. It made such speed that a workman might live three times as far from his work as before. In this way the trolley built up city suburbs.

After the coming of electric cars the cities grew marvelously and the street cars multiplied. The cars and vehicles in the heart of great cities like New York and Chicago became so numerous that they delayed one another and checked the progress of pedestrians. In order to meet this difficulty, about twenty-five years ago the elevated railway was built over the streets in some large cities, while in others subways were dug underground. New York and Boston have both elevated and subway railroads, while Chicago, already served by a large system of elevated roads, is planning an extensive subway system. Subways seem to be preferred to other means of transit because they are safer, swifter, and quieter.

The automobile with its explosive engine has come more recently, and the streets and boulevards are swarming with them as they hurry their occupants to and from



Courtesy of Prepayment Car Sales Co.

Interior of Double-deck Stepless Car, New York. Going to and from Work Comfortably and Quickly.



Courtesy of Prepayment Car Sales Co.

Double-deck Stepless Car equipped for Summer Service.

business. They enable city people to live far out in the country, even beyond trolley car service.

The elevator has helped to make possible the immense skyscrapers. By it the employees and the public reach quickly even the topmost office of these modern wonders of buildings.

Means of Communication. — The telephone enables the offices in the tall beehives to keep in touch with all parts of the city and to conduct their business from one spot. It brings together subscribers even when they live many miles apart.

City Zones. — It is this greatly improved means of transportation and communication that have made it possible to separate a city into zones or sections, some set apart for residence districts and others for business. In the best modern cities the people who swarm the stores and offices in the business district during the day may be at night in their homes from ten to forty miles away.

The Problem of Future Growth. — Men who have studied for many years this movement of mankind cityward declare that it is bound to continue and will probably increase for many years to come. This means more overcrowding, more disease, more unsightliness of streets and buildings in the places where thousands are forced to spend their lives. If this be true, the men of to-day ought to lay large and enduring foundations for the city of to-morrow.

Yet in America people have not yet learned to govern their cities well, and this is the most serious and important study of politics. The state and national governments, while not altogether satisfactory, are under far better control than is the average city. In the city it is difficult to apprehend the criminal and to stop vice and gambling. In many cases the city officials do not carry out the wishes

of the people. If we do not learn how to govern our city of to-day, what shall we expect of the city of the future with the continued spreading of city limits?

The more persons there are crowded together, the harder are all the social problems to solve — the health question, the problem of good air, light, water, and gas. Added to these are the subjects of crime, of better transportation, safer housing, parks and playgrounds, and a hundred other topics that are pressing for consideration. In order that we may understand the city and how to govern it, we must know intimately the chief problems of city life and how the wisest city administrations have solved them.

QUESTIONS ON THE TEXT

1. How long has the remarkable growth of cities been going on?
2. Is the unusual growth of cities confined to the United States?
3. Mention cities elsewhere that have grown rapidly.
4. What makes city life attractive?
5. How has the use of machinery in agriculture affected city growth?
6. The use of machinery in manufacturing?
7. What effect has the railroad had upon city growth?
8. Explain the effect of electric trolley cars.
9. Why have large cities come to use elevated cars and subways?
10. What effect will the automobiles have on cities?
11. What reason can you give for thinking cities will continue to grow?
12. Name some city problems that we have not yet entirely solved in our country.

QUESTIONS ON YOUR HOME CITY

13. Is your city growing?
14. If so, give reasons.
15. If not, why not?
16. What effect have railroads had upon your city?
17. What reasons do people give for moving to your city?
18. Have you street cars or interurban lines? If so, how have they affected your city?

The teacher should use each chapter with the questions appended as a basis for studying local conditions. With slight encouragement pupils will gladly investigate the conditions and problems of their own city and bring in valuable material for class discussion.

CHAPTER II

CITY PLANNING

City Health Conditions. — When the Boer War broke out between England and her South African colonies, men were greatly needed to swell the British army. Most of the men who offered to enlist were city dwellers, and a large part of them were rejected. Sixty per cent of the men of London who offered themselves for service were found to be physically unfit for the soldier life. This was an alarming condition caused by their manner of living in a large city. The British Empire, whose fighting force must come largely from cities, trembled to know that not half of her city men were fit to be called on to defend their flag. Then London began to tear down miles of unhealthy tenements, and to make living conditions safer for her people by providing parks where her citizens might enjoy fresh air and sunshine.

It is said that the streets of London, like those of Boston, grew up along crooked cow paths. Such narrow, ill-planned thoroughfares may serve a small town, but a large city demands more forethought. Up above these narrow streets tower mammoth buildings, story above story, each one a shelf of busy offices. One such building of twenty or thirty stories may shelter 6000 workers under one roof — a city population on one lot. Along other narrow streets are factories swarming with human workers. At the sound of the whistle the immense factories and skyscrapers send forth their thousands of employees upon the nar-

row, crooked streets to elbow one another in the rush for home.

The great cities of Germany, France, Austria, and other continental nations, as well as England, are at work in earnest to remedy health conditions. They are controlling their growth by rigid building laws. Laws have been made to provide a certain minimum of open space around each building, thus assuring a fair amount of pure air and light. A fixed amount of light and ventilation is required for each house and a limit to the height of each building, depending usually on the width of the street, has been established. Thus many of the dark, airless houses and disease-ridden tenements have been abolished, and no others will be allowed.

In order to control the future growth, certain cities have bought up and hold in public ownership large areas of vacant land both within and without the city limits. This will be sold with binding restrictions. Nothing that is of consequence to the city as a whole will be left to whims or profits of the real estate man. The restrictions have to do with the kind and character of the buildings that are to be erected, the size of the lots and the width of the streets.

One of the first needs of a city is enough streets, sufficiently wide and running in the right direction, to enable the people to go about the city quickly and conveniently. "Time saved is money earned." The day is made up of minutes, and every minute saved lengthens the day for the business man. Well-planned streets are worth many times more than they cost in what they save the people of the present, to say nothing of those in the future.

In America we are suffering from lack of laws regulating building. The cities that have building laws seldom enforce them. Much is left to the greedy or ignorant

builders, who are free to crowd people together by the hundreds in order to increase the rent. Towns and suburbs are growing up, and adjoining subdivisions are being developed with little regard to health or beauty, or to the future convenience of the people. The real estate man is determined to plan the city additions in the way that will best serve his profits.

Designed Cities. — *Washington.* — Though by far the greater number have grown up in a haphazard manner,



Our Well-planned Capital — Washington. The White House, from which Diagonal Streets Radiate.

some few cities in the world have been *designed*, that is, built up after a carefully worked out plan. The city of Washington, D.C., is the most prominent example of a city scientifically planned. After George Washington had chosen the site for our national capital in 1791, a French engineer named Pierre Charles L'Enfant, who had done good service in the Revolutionary War, was chosen to prepare a plan for the town. With wonderful wisdom and

rare foresight he made a design that not only met with the approval of George Washington and the commissioners who were then in charge, but it meets with the hearty approval of expert city planners of to-day.

The ground plan of the city of Washington is after the checkerboard fashion with a series of streets running east and west. These are crossed at right angles by another series of streets running north and south. This checkerboard plan for convenience to traffic is cut by twenty-one avenues running diagonally through the city and coming together at the Capitol, White House, and other centers and squares. The streets are lined with fine trees, they are wide, and there are many large squares. Washington has become famous throughout the world for its convenience and beauty.

Paris. — The renowned city of Paris half a century ago undertook to remodel its plan to meet the needs of its commerce, its traffic, and its growth. The work was put in the hands of M. Deschamps, who with splendid vision laid out a magnificent system of boulevards to be cut through the built-up part of the city. It cost an enormous sum, because thousands of buildings had to be torn down in order to make the fine broad avenues straight. Nothing was allowed to stand in the way of carrying out the plan. People who were disturbed in business naturally objected, but the city was nevertheless remodeled on a grand scale in order to promote the beauty of its plan and the convenience of all the people, irrespective of the few. The great avenues centered in open spaces or places that were adorned with imposing monuments. From these may be seen the beautiful vistas stretching away for miles through the city. Paris remade, resembles Washington in its plan. But it cost an enormous amount of money to effect the

change, while Washington simply grew along plans laid out for it.

Vienna. — The capital of Austria has been made over within the last half century. It was formerly a walled city, but suburbs had grown up outside the walls of the city, and the part within the walls was badly congested, or crowded, and unsanitary. Just outside the walls was a moat and a strip of unoccupied territory left bare for military purposes. When the people and the government had resolved to remodel their city, the walls were thrown into the moat, the ground graded, and all was made into a magnificent circular street or *ringstrasse*, which extends entirely around the city. A small part of the open territory was cut up into streets and the lots sold for enough money to pay for all the magnificent improvements. The rest of the space was made into parks and sites for public buildings and upon them have been erected splendid structures, famous throughout the world for their beauty of architecture and fine location. The *ringstrasse* of Vienna is considered by many the finest street in the world.

City Planning in America. — Almost the only city in America that lays claim to having been designed is Washington. Everywhere men have been too busy laying up wealth for themselves to give attention to the health, beauty, and convenience of their cities, which should mean so much to every citizen. Chicago has only recently made a magnificent plan that it will take years to realize; but when the plans are carried out, her citizens will have every reason to be proud of the improvement. Cleveland is also alive and working along this line. Millions of dollars have already been spent by the people of Cleveland to group their public buildings and to reclaim for their dwellers the noble water front along Lake Erie.

Other cities, large and small, are agitating civic questions and considering what they ought to undertake. New York has been busy wrecking buildings along some of the narrow, crooked streets, and cutting directly through a portion of the city to make room for the extension of its noble avenues. Millions of dollars have been spent on this excellent project. Baltimore has been working on the problem of its freight terminals, and has followed Chicago in appointing an eminent engineer to represent the citizens in helping to secure the proper plans and location.

Importance of Adequate Plans. — It is not always possible to tell in advance how large a city will become. The usual danger is that the city plans are too small. London and Chicago, with their congestion of crowded tenements, are examples of cities that have grown up without plans to protect the citizens of the future. When the city does not grow under an orderly plan, the result is cramped and congested districts which are both inconvenient and unsanitary. If a city has allowed itself to reach this wretched condition, the sooner it sets to work to correct them by cutting new streets, widening old ones, and making parks and breathing places for the people, the better. We have seen that the longer these corrective measures are put off the more tremendous the cost of the change.

Objects in City Planning. — In planning a city many considerations must be kept in mind. The health of the people who are to dwell in it and their comfort and convenience must come first. It is of great importance that there is direct and easy passage from one part of the city to the other. The cost of transporting goods is enormously high in some cities, because of the inconvenience of the

streets with regard to one another. There should be, if possible, one direct line from every outlying district to the business center. Beauty should also be considered, because a city ought to be pleasant to look upon. A public square with the public buildings artistically grouped about makes an attractive civic center.

Laying out the City. — *Importance of the Business Section.* — It is not uncommon for a large city to have its business section inclosed in a square or quadrangle formed by four streets considerably wider than other streets, to accommodate the heavy traffic about the business district. However the business section may be situated, there must be provision for reaching it quickly and directly from all parts of the city. This necessity, indeed, greatly determines the city's growth.

The Ground Plan. — Most cities in America have followed the checkerboard plan which William Penn used in designing Philadelphia. If the site of a city is level, this rectangular scheme is easily carried out. The chief objection to it is that only a very few of the streets lead directly to the business center. Upon these few streets there is, therefore, congestion of traffic and delay. From the outlying residence districts, instead of being able to go in a straight line to the heart of the city, people must go along two sides of a huge triangle to reach their business, and so they lose much time.

Washington, as we have seen, has met this objection fairly well by her twenty-one diagonal streets, which furnish many sections of the city with direct routes of travel. There is, however, one objection to these diagonal streets. They cut through all the city blocks in their path, leaving many irregular, almost useless, pieces of land on the corners of the blocks. Such triangular pieces are not suitable

for building, although the famous flatiron building of New York occupies such a corner. When a large city undertakes to provide enough diagonals to accommodate traffic, the number of these odd-shaped corners is very large. They may advantageously be made into grass plots with a fountain, or small parks with benches and shade trees.

In foreign cities the tendency is to use more curved and diagonal streets. The ring street is very common and very beautiful. If the site of a city is hilly or is traversed by streams, curved or winding streets may prove very convenient. Curved streets along water lines are very desirable, and the curves are more graceful and beautiful than the straight lines.

Perhaps the best plan of all would be to lay out a city like a spider's web, with the streets leading out of the center in all directions like the hub of a wheel, and with circular or ring streets crossing these and running entirely around the city. There should also be straight highways cut across the wheel at various points so that one may go directly from one side of town to the other. This does away with the many sharp angles made by the diagonal street in the checkerboard plan and it serves admirably the convenience of the people.

City Streets. — The streets in the retail districts of a large city like Chicago or New York should be from 80 to 100 feet wide, with smooth, quiet pavements. Such streets should be about equally divided into sidewalk space and roadway. Where the teaming is particularly heavy a little more than half of the street width should be given to roadway, and in this section the pavements should be of a kind to resist wear, even though they be noisy.

On residence streets, because of lighter teaming, there

is no need of the wider highway. A width of from twenty to thirty-six feet is sufficient. This does not mean that the street, as a whole, should be narrower; but that more space should be given to parkways with grass, trees, and

shrubs that furnish a playground for the children and a spot of recreation for all the residents.

The avenues or traffic streets which carry through traffic from one part of the city to the other should not only be wide enough for double street car tracks, but must also be wide enough for the stream of vehicles moving on either side of the tracks to pass without interfering with one another.

It is unpleasant for those bent on driving for pleasure



Broadway, New York. A Busy Thoroughfare.

to pass through the crowded business section where the streets are full of traffic and teams. This has been avoided in many cities by building circular boulevards or ring streets to pass entirely around the business section. Some cities have two or more of these circuits, at varying distances

from the center. Those designed chiefly for pleasure may connect the city's outlying parks. Other European cities besides Vienna were formerly encircled by fortification walls. In many cases, when the city outgrew these bounds the walls were torn down and the space left was made with little cost into a circular boulevard of great value and beauty. Such a boulevard serves the pleasure of thousands and thousands of people, providing as it does parkways with grass, trees, and beautiful buildings in the closely built part of the city.

Boulevards are handsome broad streets on which heavy traffic is forbidden. They are the avenues of fine dwellings with ample spaces ornamented with grass, flowers, and trees, and perhaps an occasional statue or fountain. The boulevards frequently connect the large city parks, and are made for pleasure driving and recreation. They help to beautify our cities and raise the ideals of the people.

Cities that have few or no diagonal streets should cut them through even at a great expense, for they will soon repay the first cost. A great deal is being said now about the importance of ventilating a city well. Diagonal streets in connection with the others will give sweep to winds coming from any direction, and thus secure more frequent changes of air in the crowded districts.

Civic Centers. — In every city of any considerable size there are a number of government buildings such as a court house, city hall, post office, and, in at least one city of every state, a state capitol. These and other public buildings that are put up in a substantial way should be grouped together in a central and convenient place, forming a civic center. This center should have plenty of space at the junction of some of the main streets and avenues. Here the city should attempt to show its individuality by grace-

ful and imposing buildings, well-grouped and similar in workmanship, and so arranged as to create a pleasing harmony of color and design. Surrounding the buildings should be flower gardens, trees, statues, and monuments. Broad avenues leading to this center would furnish a view to people miles away, instilling a pride and love for their beautiful city.

Such a noble center had Rome in its majestic Forum and Athens in her glorious Acropolis. The grandeur of the Forum and the Acropolis still commands our admiration, and our architects go to these cities for many lessons in beauty. A civic center of this sort may unify the city by having parks, boulevards, harbors, railway terminals, and the like, all planned with reference to it.

Social Centers. — Modern city planning places great stress on the civic and social centers, and many American cities are working out elaborate designs for them. Besides the main civic center there are also being created subordinate social centers for the various sections which make up a city. At some convenient point in each section are grouped the public and semipublic buildings that serve the neighborhood, such as the school, the fire station, the police station, church, social clubs, and the like. All these buildings are to be harmoniously planned for the convenience of the people and the beauty of the locality.

Parks and Playgrounds. — In planning a city much attention should be given to parks and playgrounds as open breathing places for the people. A community's first need is for numerous small parks well distributed over the city, so that the dwellers in any region may be able to reach at least one park easily and quickly. An ideal condition would be a small park or playground in walking distance of every home. This would enable both children

and parents to use the park daily instead of only on Saturdays and Sundays. It would also do away with the item of carfare, a bar to many.

Large parks of a hundred acres are very desirable. They beautify a city, attract the right kind of citizens, and furnish means of education in the way of public gardens and museums. But the large parks mean very little to the poorer people who cannot afford time and carfare to visit them. The first object of a park is to promote public health by supplying open-air recreation; so a number of smaller parks are to be preferred to one large one.



Pittsburgh. An Opportunity for a Pleasing Water Front.

Water Fronts. — In all well-planned cities, like Paris and Berlin, every opportunity is taken to beautify water frontages, such as rivers and lakes or the ocean shore. There is something soothing and pleasing in a water scene, and citizens have a right to such pleasure. Splendid bridges are built over the rivers, such as those spanning the Seine at Paris. Along the river banks on either side are fine drives and promenades adorned with trees, grass, and monuments. No city can afford to neglect its water front

nor should water fronts be given over entirely to factories and industries. They should be made accessible and a means of recreation for every resident of the city. Water scenes belong to the people.

City Zones. — In some German cities a zone system has been adopted. Under this system sections of the city called zones are set apart for certain uses and cannot be used for any other purpose. A certain zone is given over to factory purposes. All factories must be built in this particular zone and nowhere else in the city. Another zone is devoted to the uses of wholesale business, while another serves for residences, and for nothing but dwellings. This is a much safer plan than that followed in many of our American cities, where a man may build a beautiful residence and have no way of preventing the man who owns the lot next to him from putting a livery stable or a factory upon it.

Every city ought at least to reserve suitable areas for factories where they will have every convenience of transportation and supply for their work and where they will create the least nuisance to the other business of the city as well as to the residence districts.

Importance of Railroads. — Modern cities are largely influenced in their growth by good transportation both by water and by rail. Many cities have been made by railroads, others by good locations for the water-carrying trade. The town with the best and cheapest railroad service has an advantage over every other city because its merchants can do business more cheaply and more promptly. They can receive or ship out products more easily, and such an advantage attracts trade and merchants, thus bringing wealth to the city.

Why City Planning Pays. — City planning is urgently needed for many reasons. It promotes trade by providing

direct and easy ways for the extension and development of commerce; it aids city growth by making it easier and cheaper to conduct all classes of business; it increases and safeguards all property values by preventing the many evils of haphazard building; it makes every citizen a more efficient and more effective worker by saving time and money in the transit of goods and people; and, above all, it assures to that city which adopts it a future citizenship or population sound in body, mind, and morals.

QUESTIONS ON THE TEXT

1. What bearing did the Boer War have on conditions in England's cities?
2. What building laws are enforced in European cities?
3. How do certain cities control their new subdivisions?
4. Why do our real estate men plan poorly?
5. What is it to design a city?
6. Discuss the Washington plan.
7. What has Paris done to make a noted city?
8. What splendid plans did Vienna carry out?
9. What American cities are now working out extensive plans for convenience and beauty?
10. What are the objects of city planning?
11. Describe various general plans for the streets of a city.
12. What local conditions must be considered in adopting a plan?
13. What can be said in favor of ring streets?
14. Discuss width of streets.
15. What advantages are afforded by diagonal streets?
16. What are civic centers?
17. What ancient cities set fine examples?
18. Discuss social centers.
19. Why should parks be provided?
20. Where should the smaller parks be placed? Why?
21. What is the zone system?

QUESTIONS ON YOUR HOME CITY

22. Have any well-arranged plans of improving your city been considered?
23. Do you have a civic center?
24. If so, what buildings are located there?
25. Are the buildings similar in design, or is each planned without reference to the others?
26. Do you have diagonal streets?
27. What plans could you suggest for making your city more convenient, or more pleasing, or more healthful?

CHAPTER III

CITY HEALTH

Sanitation in Ancient Cities. — The cities of the Roman Empire made great strides, for those times, in matters of health and sanitation. They were provided with extensive city water systems which brought pure water in great aqueducts from far-off mountain streams. They drained swamps and put in large sewers to help keep the city dry, clean, and healthful. But after the Empire went to pieces the cities soon lost these healthful conditions.

In the Later Centuries. — During the Middle Ages the cities of Europe were terrible places of filth and disease. The drinking water from wells that received surface drainage was impure and full of germs. The streets were unpaved and muddy in wet weather. Besides, they were piled with refuse and rubbish, while the alleys were heaped with garbage. There were no sewers, and no attempt was made to keep the cities clean. Terrible plagues swept over the land frequently, sometimes destroying more than half the people in a few months. The ignorant people fled from the plague as from fire, but as many of them had already been exposed, they merely succeeded in spreading the disease.

Modern Times. — The centuries following the Middle Ages slowly made progress toward better health conditions. But during only the last fifty years has there been marked headway. Modern cities the world over have advanced rapidly in matters of health and sanitation. The

modern city is clean. To be sure, some are cleaner than others; but compared with those of fifty years ago all are respectable. There are numerous reasons for this improvement.

The Death Rate in Cities. — It is said that the death rate of a city is a mark of its progress in civilization. By death rate is meant the number of deaths per one thousand inhabitants in a year. Twenty years ago a city was thought to have an unusual record if its death rate was as low as twenty per thousand. Now a rate of twenty per thousand is considered so high as to need explanation. In 1912 several large American cities had rates below fifteen per thousand.

In the year 1871 the city of Munich, Germany, had a death rate of forty-one per thousand. At that time the city had no water system and no sewer system connected with the houses. Water was obtained from shallow wells. And ordinary earth vaults or closets were in use. In 1873 cholera swept over the city, increasing its death rate to forty-three per thousand. By the year 1908 the death rate of Munich had been reduced to 17.9 by checking preventable diseases. Pulmonary tuberculosis had been cut down more than one half. There was even a better showing in some other diseases.

How Science Prevents Contagion. — The dreadful epidemics that formerly wrought havoc in cities have for the most part been conquered. Smallpox is a loathsome disease, and at one time it was one of the most frequent causes of death in large cities. In 1798 Edward Jenner discovered a method of vaccination against smallpox which was a great boon to the human race, as it checked the disease. To-day people differ as to the need for vaccination, for our health departments have now facilities for dis-

covering the disease early in its career; and by separating patients from contact with other people, it is kept from spreading.

About thirty-five years ago one of the greatest gifts ever bestowed upon mankind was contributed by Louis Pasteur of France. He discovered and made known to the world the fact that bacteria have a large part in causing many diseases. This discovery has entirely changed the theory and practice of medicine. By means of it many dire diseases have been conquered.

Typhoid fever is being reduced since it has been found that the germ which causes it is spread by means of foul drinking water. Cities are looking after their water supply more carefully. It has also been found that cholera, while quite a different malady from typhoid, is spread in practically the same way. Thus the worst of the old plagues have been conquered through the discovery of their causes. Cases of the "great white plague," or tuberculosis, have been greatly reduced in number. Those cases that are discovered early are being cured. Cancer has not yet been overcome, but that is probably only a question of time. In 1894 an antitoxin was discovered for diphtheria, another of the so-called fatal diseases. This antitoxin has greatly reduced the number of deaths from diphtheria. Since the mosquito has been convicted as the chief agent in spreading yellow fever, this troublesome pest is being scientifically banished from cities and homes. War is now waged against the common house fly.

Modern Sanitation. — The death rate does not depend upon the size of the city. London, the world's metropolis, has a death rate of only fourteen per thousand, a lower rate than most smaller cities. The death rate does depend partly upon the draining and housing conditions, the general

city cleanliness, the water supply, and the air. These, in turn, depend upon the general city management and the habits of the people.

Drainage and Cleanliness. — Our cities have all recently been provided with better sewers. At first sewers were merely drainage pipes which kept the ground from becoming wet and full of puddles by carrying off surface water. Since then, sewers have been connected with the waterworks system so as to carry off the waste water from sinks, wash-tubs, and the like. Still more recently sewers have been used to carry off the flushings and human waste from the water closets that have been installed in the homes. It is certain that these improvements in sanitation have had a helpful influence on living conditions and the death rate has been reduced thereby.

There are many different methods of disposing of the various kinds of household waste. Some cities collect ashes, garbage, and rubbish and burn them all together; others collect them and destroy them separately. But no matter how it is done the up-to-date city is disposing of its waste, and the result is cleanliness and improved health.

The old rough pavements of cobblestone of former years are giving place to smoother surfaces of asphalt, smooth stone blocks, and wood or brick that can be washed as well as swept. The old practice was to clean the streets only when dirt and rubbish had piled up so much as to hinder traffic. Main streets were cleaned about once a week and others once or twice a month. In wet weather a layer of mud covered the pavements and in dry weather the dust, laden with germs, was on windy days intolerable. It swept into homes and stores and was breathed into everybody's lungs.

In well-kept cities of to-day there is but little mud or dust. The streets of the business section of a city are

washed every day or night and a large force of men are kept at work during the day cleaning them. Keeping the streets clean is the first step toward municipal cleanliness. The next is to secure clean houses and clean yards.

Pure Water. — All modern cities now have a pure water supply, and plenty of it, ready to be turned on at any time. Besides furnishing pure water for drinking and cooking, such a supply greatly encourages cleanliness, and thereby improves the health of the community.

Food Inspection. — In order that a city population may keep well they must have wholesome food. The modern city tries to insure this. While the purchase and sale of foods are dealings between individuals, the city tries to secure for its people good transportation and pure food. Most up-to-date cities have laboratories in which foods of all kinds may be tested. When dealers are discovered selling goods that do not measure up to the rules of the health department, the men are fined or otherwise punished. Meats, milk, butter, and cheese are carefully inspected by city officers, and whatever is found to be unfit for use is not permitted to be sold. Foods that are liable to spoil quickly are kept in cold storage. And ice is used in the homes in hot weather to help preserve foods. This use of refrigeration is a means of the greatest importance in preserving health.

In every health report of a city like Chicago, Philadelphia, or New York several milk dealers are reported as fined for selling milk with too little butter fat in it; others for not keeping their quarters clean. Bakers have been fined for not keeping their bread properly protected or for using unsanitary rooms for handling food supplies. Wherever hotels, restaurants, soda fountains, and ice cream factories are found violating health rules they are liable to a heavy fine.

Ventilation. — One of the great problems that American health officers are trying to work out is the task of seeing that people have pure air to breathe, especially in public places. The time will come when we shall require every building, whether a business establishment or a home, to be properly furnished with a method of regularly changing the air. The places that should be attacked first are the closed street cars and the small theaters and picture shows. In any large city there are great numbers of these unventilated places. Smaller towns often fail to provide for the forcing of fresh air in and out of their schoolrooms. Because it costs a little money to run a power fan in a school, it is frequently not provided. The moving picture shows are opened in all sorts of buildings, where they are allowed to operate, and so spread disease germs through their foul air.

Breathing foul air weakens the health and invites all manner of disease, but the chief one to be dreaded is tuberculosis, or the "great white plague." More than 150,000 die annually in our country from this dread enemy. We are told that a million tuberculosis victims are all the time spreading the dangerous germ of tuberculosis in schools, theaters, and in every public place.

The unventilated theater is said to be little if any better than the Black Hole of Calcutta. Samples of air were recently taken from two theaters, one of which was well ventilated. The air of the ventilated theater yielded upon test five colonies of bacteria, while that of the theater that had no ventilation showed two hundred and fifty colonies. The chances of picking up infection were about fifty times greater in the unventilated building.

Contagion Checked. — Careful precautions are now being taken in the modern city against the spread of contagious diseases. Materials or clothing in contact with persons

afflicted are disinfected or burned, and the sick are isolated or quarantined. Common drinking cups are giving place to individual cups or to the sanitary fountains. Communion cups and common towels are being banished. Hereby the danger of contagion in public schools and in large factories, centers for the spread of contagious diseases, is greatly reduced.

City Health Departments. — The modern city health departments are doing a splendid work in saving human life. They are reducing the number of deaths from preventable diseases. They are enforcing the city's laws or ordinances against dirt and against the selling of impure foods; they are inspecting dairies, milk bottling plants, groceries, drug stores, and other shops, and in a score of ways they are improving the public health. Every citizen should give his heartiest support to the rules and regulations of the health department.

QUESTIONS ON TEXT

1. What means were taken in ancient Roman cities to safeguard health? 2. Describe living conditions in cities of the Middle Ages. 3. What is meant by the death rate? 4. How was smallpox conquered? 5. What service to mankind was rendered by Pasteur? 6. What is diphtheria antitoxin? 7. What means have been used to reduce the death rate? 8. What is the purpose of food inspection? 9. Who are the people most often found violating health laws? 10. What are contagious diseases? 11. What means are used to prevent their spreading? 12. What are some of the duties of modern health departments?

QUESTIONS ON YOUR HOME CITY

13. Are the theaters and moving picture shows in your city well ventilated? 14. How do you ventilate your home? 15. Name some health laws or ordinances of your city. 16. What is the death rate of your city? 17. Are spoiled or dirty foods sold in your community?

CHAPTER IV

THE CITY WATER SUPPLY

Importance of the Water Supply. — The first great need of man for sustaining life is food, but he cannot live long on food alone, for he must drink even more often than he eats. Most of the livable places of the earth have plenty of water, but in these days man is not willing to take the time to go to a stream or a spring every time he wants a cup of water. He must have a supply convenient so that, by simply turning a faucet, he may have an abundance in the kitchen, in the bath, and on his lawn. Another important consideration is that the water he uses for drinking and cooking purposes shall be pure and wholesome. It has taken a good many years to master all the difficulties which have been encountered in working out the problem of a good and convenient water supply for cities and towns. Many cities are still puzzling over it.

A system of public waterworks is now thought to be necessary to every city and village. Not only is water needed in the home for drinking, cooking, washing, and cleaning; but it is needed for fire protection, for sprinkling streets, and flushing sewers to keep them clean. Water is also used in parks and on private lawns. In addition, nearly every city has a factory of some sort, perhaps many factories, where water is converted into steam to run machinery. Sometimes it is used in the products made in the factory.

For use in the home, water should be clear and pure,

with a pleasant taste. When used to feed boilers, it ought to be free from lime and other minerals that form crusts and thus do injury to the boiler. Soft water is best for this use, because it is almost free from such minerals. For fire protection, any kind of water supply will answer, providing it is not so dirty as to ruin the goods and furnishings in the burning buildings. Only a very small fraction, about a hundredth of the water pumped by the waterworks, is used for drinking and cooking; and this portion intended for home use is all that really needs to be absolutely pure; but it costs so much to support two systems of waterworks, one for drinking and one for other uses, that most cities have only the one supply of water.

Where the Water Problem is still Unsolved. — Only the civilized peoples of to-day have attempted to solve the water problem. The inhabitants of many lands have made very little progress in the matter. In the smaller towns of Korea the citizens get water from wells. It is carried from house to house by men or boys who make this their business. Each carrier has two large buckets which are fastened to a framework resting on the shoulders. Every family pays so much a day or a month for their supply of water, and it costs a great deal. Family washings are taken to the river or creek. In the cities of India water carrying is as much a trade as that of a blacksmith is with us; and the sons of water carriers must take up the same occupation as their fathers.

Along the streets, in some countries, men carry water in goatskins on their backs. In Tripoli water is put in barrels, and camels are made to kneel at the wells while the barrels are slung across their humps, one on each side. In other countries, like Palestine, girls and women carry water in jars upon their heads. They often carry jars

holding three or four gallons of water. Balancing these heavy vessels upon their heads, they walk along without even touching them with their hands.

The Problem of Primitive Man. — In the days when men dwelt in trees and in caves, they always chose their home near a spring or a river, because there was a time when they had no vessels in which to carry water, and it was risky to live too far from the water supply when the forests swarmed with dangerous wild beasts. So people chose their homes in river valleys or on the hills close by. Perhaps gourds and clamshells were the first drinking cups. Later, a leather bag was used for carrying water.

When the time came that men were unwilling to go to a river or a spring for water, they began to dig wells. These shallow wells may be found to-day among many savage tribes. They are only a few feet deep, scooped out of the ground in moist places. Joseph's well at Cairo is an example of the progress made by the ancient Egyptians in making wells. It shows remarkable skill, for it is dug to a depth of nearly three hundred feet in solid rock. The water is raised in buckets on an endless chain operated by mule power. Many ages ago the Chinese dug wells much as we do to-day. Some of these were a quarter of a mile deep. The ancient peoples, especially in Egypt and India, learned to build great reservoirs for storing water in the dry seasons.

Roman Aqueducts. — The Romans built the most remarkable water supply systems of all ancient peoples. For a long time the city of Rome obtained its water from the Tiber River, and from other streams and springs near by. But the water from these rivers in time became so polluted with sewage that disease frequently broke out in the city. Then a water supply was sought from the distant moun-

tains. The Romans constructed long conduits or aqueducts to carry water. They were great stone troughs often built high above the ground on huge pillars of masonry.

These aqueducts sometimes ran through hills in long tunnels. The lines of stone arches that carried the huge troughs across the river valleys are the wonder and the admiration of the world to-day. At last Rome had fourteen great aqueducts which, if placed end to end, would reach 359 miles. These furnished, in the days of Constantine, 926 public baths, 1212 public fountains, and 247 reservoirs scattered about the city. Water was not piped into the homes of the Romans. They obtained it at one of the many public fountains. Even the smaller cities of the Roman Empire had their waterworks, some of which have been repaired and are in use to-day.

In the Dark Ages. — After the German barbarians destroyed the Roman Empire, the aqueducts were neglected and fell into disuse. Townspeople went back to the old way of using water from the nearest river. During the Dark Ages that followed, dreadful pestilences swept over Europe, due, no doubt, to the use of impure water from the rivers made foul with sewage.

Gradual Improvement. — After nearly a thousand years of ignorance, disease, and pestilence, the cities of Europe began to improve their water supply. Paris built, about the year 1200, a small aqueduct that furnished one quart of water a day to each citizen. Nothing further was done for three hundred years. London also built a tiny aqueduct. Then in time pumps came into use.

London and Paris built huge pumps on their neighboring rivers and operated them by water power. Still for two hundred years longer the people of Paris had but a little more than a half gallon of water a day for each citizen.

We can appreciate how insufficient a half gallon a day is, when we are told that many cities to-day furnish two hundred or even three hundred gallons a day to each person. The steam engine later took the place of wind and water power, and was hitched to great pumps to supply cities with water.

The Distribution of Water. — Now came the question of how water was to be carried to the people. Should they be compelled to walk long distances to reservoirs and carry it home in buckets? This problem was at last solved by laying water pipes underneath the streets to each house. For many years the larger pipes were of wood made by boring out logs to a diameter of six or seven inches. In London, as many as ten of these wooden pipes were laid side by side to form a single main. Chicago's early water pipes also were of wood. Cast-iron pipes, however, came into general use about the year 1800.

Great pipes called mains now lead out from the city water-works through the chief streets several feet below the surface, so that they will not freeze in cold weather. From these mains smaller pipes lead off under the side streets, and from these pipes a still smaller one leads underground into each building and home. These pipes are usually of iron, and if all the pipes in any one city were placed end to end, the line would be many miles in length (p. 56).

When water was first supplied to each house it was thought to be impossible to furnish a pressure all the time. Water was turned on for only a few hours a day, and the consumers were obliged to draw off a supply to last them for twenty-four hours. It was less than forty years ago that the people of London began to have a continuous supply. This was much needed for fire fighting and for keeping the city clean, as well as for household convenience.

Waterworks in America. — Boston was the first American city to grapple with the water problem. There was built an aqueduct that brought water from certain springs located higher than the city, so that the water flowed into the pipes without pumping. About the time of the Revolution, other cities here began to use iron pumps to raise water to a sufficient height. The first steam engine for this use in America was employed in Philadelphia in the year 1800. It is now rare to find in our country a village of two thousand inhabitants that has not its own public water supply.

Present Methods of Supplying Water. — It will interest you to know how the various towns force water into the houses. There are many different methods. If a city is so located that it can have a reservoir on a near-by hill higher than the roofs of all the buildings, then water will run of itself into every faucet and the fire hose will shoot streams of water over the tallest roofs, because they are lower than the reservoir. The water in the reservoir creates a pressure that forces a stream of water into the pipes of every building in the town.

But how do cities in flat, level regions get a pressure on their water supply? They must either build reservoirs in distant mountains which are higher than the city and pipe it down to their homes, or the city must build a huge standpipe or tank, placed on masonry, high above the tallest buildings. By keeping this high tank filled with water by means of monster pumps, the pressure of the water in the tank drives the supply into the street mains and forces it into the houses. Nearly every city that depends upon pumping has some sort of hilltop reservoir or a standpipe to furnish the sudden large demands for water for fires. The standpipe also furnishes a supply of water during the



Maywood (Ill.). Waterworks showing Standpipe.

night, so that the pumps may be shut down and the fires banked in the evening, giving the engineer a rest and saving coal. Chicago and other large cities have no reservoirs or standpipes to furnish pressure. They depend upon immense pumps, which must be kept going day and night.

Not only does the laying of the pipes beneath the streets cost a great deal of money, but the reservoir and the standpipe add much more to the expense of waterworks. Then there is costly machinery to pump the water; and electric power or fuel to operate the machinery. Last of all, the engineers who take care of the waterworks plant must have a living salary. All this expense is met by selling city bonds and by putting a tax of a few dollars a year on every family that is supplied with city water.



Pure Water for Birmingham (Ala.)

Most cities own their own waterworks. They employ engineers and usually the water is furnished to the people for just about what it costs the city to run the plant. In other places private companies have built the waterworks. They have been given permission by the city government to run their pipes through the city streets, such rights to continue for a term of years. Private companies usually charge higher rates for water, as they naturally wish to make money above their expenses.

Sewage in Water. — Water may look clear and pure and yet be dangerous to health. The thing that most often pollutes the water supply is sewage. Sewage has in it millions of microbes or bacteria. Some of them, when taken in drinking water, cause typhoid fever; and others, cholera. Typhoid fever is one of the leading causes of death in our country and is most often contracted by drinking impure water.



Reservoir and Pumping Station.

A large number of our cities and villages dump their sewage into convenient rivers, and the towns farther down the stream use the polluted water. These cities, in turn, discharge their sewage and other refuse into the same stream. Rivers will purify themselves if the water is allowed to run for many miles without receiving fresh quantities of sewage, but cities are growing up closer and closer together, and the water becomes so full of poison that epidemics of typhoid fever break out at the same time in a number of towns located on the same stream. In many parts of Germany the river water is of unusual purity, because the city governments have very strict laws about dumping sewage; there is seldom a case of typhoid.

Sources of Water Supply.— *Springs.* — The best sources of pure water are springs or wells driven deep into the earth. The city of Vienna, in Austria, has at its feet a

mighty river, the second largest in Europe. But Vienna was unwilling to trust the health of its people to the Danube water. Millions of dollars were spent in building a sixty-mile aqueduct which brings pure water from springs in the far-off mountains. The pressure from the springs at such a height saves the expense of pumping.

Wells. — There are many cities in our country that have this advantage of pure spring water without pumping, but some of these places have grown so marvelously that the springs fail to furnish them enough water, and other sources are sought for. Smaller cities and villages frequently get their water from deep wells, because water obtained in this way is almost as pure and good as spring water, except that it is so hard and full of lime that people must use a great deal of soap or water softener when washing with it. Aside from this disadvantage, well water has to be pumped, an added expense.

Our wells of to-day are different from those of long ago. Instead of digging a big, round, shallow hole in the ground and walling it up with brick or stone, we use machinery to bore a small, very deep hole, only a few inches across. Such wells are driven deep into the earth through various layers of rock until a vein of good water is met. As the hole is bored, an iron pipe or tubing just fitting the hole is driven down to keep the earthy sides from caving in and also to make sure that the water will come up clear and free from dirt. Some of the bored wells go down a half mile into the ground. There is one near Leipzig, Germany, that is over a mile deep.

In drilling deep wells, we bore through layers of dense rock that will not allow water to pass through them. Next to these layers of dense rock, perhaps, are spongelike layers, porous and full of water which has soaked from a higher

level, for the layers of rock are sometimes tilted or sloping. In such cases when the drill strikes the porous rock, the water gushes up with great force many feet in the air, as though it were just freed from a prison. These spouting wells are called artesian wells, after Artois in France, where such drilled wells were first made. Few wells, however, are artesian, but require large pumps to draw the water from the depths of the earth.

A few large cities, like Indianapolis, obtain enough water from deep wells. Indianapolis has bored many wells three hundred feet deep or more, each ten inches in diameter, through the layer of limestone beneath the city. From these wells the city receives many millions of gallons of water each day. It is always pure and wholesome, but, of course, it is hard water.

The reason it is usually impossible to supply a large city with water from wells, is that when many wells are sunk in the same region, the water is pumped out of the earth faster than it soaks in from rains; and with so many wells feeding from the same rock layers, the supply is not enough for a large need.

Lake Water. — Therefore most of the large cities must look either to lakes or to rivers for their water supply. Lakes usually furnish a purer water than rivers, because they are less likely than rivers to become contaminated with sewage. If the lake is in a mountainous country, the water often runs down hill to the city, and there is no expense for pumping. Manchester in England has purchased a lake a hundred miles away, from which water flows through great stone troughs to the city. Glasgow, Scotland, might have plenty of water of a sort close at home, but the city purchased for its water supply Loch Katrine, thirty miles away.

The custom of using lake water for city supply is very popular in the United States. This is especially true in the Great Lake region, and is true everywhere along watersheds where lakes abound. Since many of our lakes are not high above sea level, pumping is usually necessary. When a city like Chicago or Cleveland stands on the edge of the lake and discharges refuse and sewage into it, the



The Chicago Drainage Canal.

intake for the water supply must be some distance from shore, at least several miles out.

As Chicago grew from a frontier town to a great city, the lake water became so contaminated with sewage that something had to be done. The city had been dumping the sewage into the Chicago River, which took it into the lake. Then the city undertook to change the course of the Chicago River by deepening its bed so that instead of flowing into the lake it would flow away from it. Across

the low divide between the Chicago River and the Illinois, a great drainage canal was dug joining the two streams. Now the sewage of Chicago, instead of being sent into Lake Michigan, is carried into the Illinois River and by it into the Mississippi. In this way the lake water is left pure, and the death rate in Chicago has been lowered.

River Water. — While some cities are securing water from springs, lakes, and wells, the greater number are dependent upon rivers for their supply. This method presents two problems besides the necessity of pumping. One trouble is that river water is usually turbid, or muddy, especially after rains, and this mud or silt needs to be removed. The other task is to filter out the dangerous bacteria which come from the sewage of other towns along the course of the river.

Purification. — One method of removing the mud or silt is by providing huge settling tanks, or reservoirs, in which the water is stored for a long enough time to allow the sediment in the roily water to settle to the bottom. A way to get rid of the sediment quickly without keeping it long in the settling tank, is to mix in the water lime and sulphate of iron or alum. These minerals gather or collect the particles of silt, making them settle more quickly. This process of settling the sediment of water is called sedimentation, and nearly all cities that use river water have adopted it in some form.

Bacteria are removed from water chiefly by filtering or straining it. This is ordinarily done by passing the water supply through three or four feet of sand, which removes the bacteria and sends the water on pure and safe. Each grain of sand is said to have upon it many harmless bacteria, and they soon make way with the dangerous bacteria, either by killing them or by using up the food upon which

they live. Filtering water is a rather expensive process, but more and more cities are adopting it.

The water for the city of Washington is brought from the Great Falls of the Potomac through an aqueduct to a big reservoir. From the reservoir the supply passes to be filtered into twenty-nine great chambers underground. These chambers are made of concrete, and their floors are covered with four feet of sand and gravel. When the water flows into these sand-bottomed chambers it passes slowly down through the sand, which acts like a strainer in removing the dangerous bacteria. Then the purified water goes into another big reservoir, from which it is pumped to the city mains. Each chamber will filter three million gallons of water a day.

The sand filter takes from water its impurities, so after a great amount of water has passed through, the filter becomes clogged. Then the water supply is turned off while the filter is washed and cleaned. This is usually done by machinery which forces water through the filters from below upward while the sand is stirred thoroughly all the time. The unclean water is thrown out and after the sand has settled back in its bed, the filter is ready to work again. Where water is forced through the sand filters in great quantities they must be washed two or three times a day. But if the sand filters are very large, covering part of an acre, and the water is allowed to pass through them very slowly, they do not need to be washed so often. Perhaps only once a week, or in some cases once each month.

Brooklyn secures a great part of its water from wells driven in coarse sand and gravel, which act as a filter for the water, sending it up pure. Along the Ohio River some cities have put down on the sandy shore, or at the edge of sand islands, huge steel tanks closed at the top and per-

forated in the bottom. The only way water can get into these tanks is by passing down through several feet of sand and gravel outside to the bottom of the tank. The water passes readily through this sand filter and then through the perforated bottom of the tanks, keeping them full of pure water. To the top of each of these tanks is attached a pipe through which the pure water is pumped to the city reservoirs.

Waste of the Water Supply. — The task of filtering millions of gallons of water for a large city every day is stupendous, to say nothing of the cost. Many citizens waste such quantities of water that it has sometimes been found necessary to pump three hundred gallons a day for each man, woman, and child. Before the water used by each family was measured by a water meter, people were very careless about wasting it. They allowed toilets and faucets to remain out of repair for a long time, and permitted faucets to run at night to keep the water pipes from freezing. There was no end to the amount of water wasted. In some places it was found that half the quantity pumped was allowed to waste in this useless fashion. The expense of pumping this extra amount of water added to the tax, and careful persons had to help pay for what the careless ones wasted.

Then a water meter was put in the house of each consumer. If he uses more than a fixed amount, he pays extra for it. Now cities that use water meters find that in many cases fifty gallons of water a day for each person is all that is needed. This has so reduced the cost of pumping that many towns are able to afford filters because of the moderate amount used. Filtering will soon be employed in every city that depends upon river water. In Germany the law requires all cities using river or surface water to

filter it. This is why there are so few cases of typhoid fever in European cities as compared with ours.

New York's Water Supply. — New York City has a remarkable water plant. Many years ago the city built a great dam across Croton River to store up the flood waters of the winter season. This dam now holds back a large body of water which is known as Croton Lake. From this lake an aqueduct leads to the city. But as the city grew, larger aqueducts were built, and at last Croton Lake would not furnish the supply of water needed. Then the city bought all the lands that drained into Croton River and dammed up the tributary streams, making several smaller lakes that are used to feed Croton Lake in dry weather.

Still the city of New York was in danger of running short of water. So the authorities went far up into the Catskill mountains a hundred miles from the city and built the largest reservoir for city water supply in America. Ashokan Reservoir will hold billions of gallons of water; and, like Croton Lake, it drains a wide area, receiving water from several small rivers that may also be dammed up when there is need for a greater supply. The reservoir will hold enough to supply greater New York for fifty days.

Connecting the Ashokan Reservoir with greater New York City is an enormous aqueduct tunnel one hundred and eleven miles long. It extends from Esopus to Brooklyn and Staten Island. Through most of its length the tunnel runs from 400 to 700 feet underground. In one place, where it passes under the Hudson River, it drops to a depth of 1200 feet below the surface. For nearly eighteen miles it was blasted through solid rock. It is by far the longest and deepest water tunnel in the world. Except the Panama Canal, the tunnel is said to be the greatest engineering feat in history. It cost more than 150 million



Ashokan Reservoir.

dollars, and nearly 300 human lives; for there were many accidents in the underground blasting.

How Los Angeles and San Francisco Solve the Problem. —

Los Angeles has built a wonderful aqueduct far up among the Sierras, to secure pure water from a river that is fed by mountain streams. The aqueduct, 226 miles long, would reach nearly across the state of Ohio. It has 151 tunnels, the longest of which is the "Elizabeth," which is bored five miles through solid granite near the top of the Coast Range mountains. Then it crosses a deep cañon through an enormous iron siphon or pipe. It passes through mountains and across deserts to reach the city. There are five great storage reservoirs to hold back a supply of water for the dry season.

San Francisco has been in need of a larger water supply, and the city sought permission to build a great reservoir far away in the beautiful Yosemite valley. Many citizens throughout the country were for a time opposed to this, because they feared the magnificent scenery of this national park would be spoiled by the plans of the waterworks. But after plans had been carefully prepared that would not mar the beauty of the park, Congress granted this privilege, and the western metropolis will shortly have her need supplied.

QUESTIONS ON THE TEXT

1. What are some of the uses of water in a city? 2. Why should city water be pure? 3. Describe the method of getting good water in Palestine. 4. What were Roman aqueducts? 5. Describe Paris's first waterworks. 6. How did the invention of the steam pump help? 7. What kind of pipes were first used to distribute water? 8. What was "part time" water supply? 9. How did Boston's first waterworks operate? 10. What are the advantages of standpipes? 11. How are public waterworks paid for? 12. Name some cities that use



A section of the Los Angeles Aqueduct, showing a portion of the nine-mile siphon.

spring water. 13. What can you say about deep-well water? 14. What are artesian wells? 15. What is the Chicago drainage canal and why built? 16. Why should some water be filtered? 17. Describe a filter. 18. Some cities have natural filters, how do they operate? 19. Why are water meters used? 20. Describe New York City's water supply.

QUESTIONS ON YOUR HOME CITY

21. Describe your city's waterworks. 22. How does your city secure water pressure? 23. Does your city own its own waterworks? 24. What is the annual cost of city water for your home? 25. Can you read a water meter? 26. Does your city need to filter its water? 27. Why or why not? 28. Do other cities contaminate your water supply? 29. Find out from your health officer how many deaths occur annually in your city, due to typhoid.

CHAPTER V

DRAINAGE AND SEWERAGE

The Need of Drainage and Sewerage. — In order that cities may be healthful places in which to live, it is necessary to drain them properly. The waste from all places using city water must be carried away. The rain water that falls in the city must also be carried off promptly; for if it is allowed to stand on the surface, it will cause much inconvenience, and possibly disease. Poor drainage will make cellars damp and unhealthful.

Besides the surface water, kitchen refuse, grease, soap, and human waste, which are called sewage, are even more likely to breed disease. The sewage very soon gives off a poisonous gas commonly called sewer gas. If this poisonous gas escapes into cellars, it gradually passes through all parts of the house, and may cause illness of various sorts. Sewage is the chief means of spreading typhoid fever by contaminating the milk and water supply.

Sewerage Problems. — The first object in planning a sewerage system is to remove sewage wastes promptly. For this purpose the city streets must be underlaid with a network of pipes quite as extensive as those of the waterworks system. By this plan the sewage is carried through the pipe system to some point beyond the city limits, where it is discharged into a river or lake.

Carrying off the sewage is only half the task, for in order to be safe, it should be purified or disposed of in a safe and inexpensive manner. Most American cities merely dump

their sewage into a river or lake without purifying it, but the time is coming when such disposal of sewage will no longer be tolerated, because it pollutes the water supply of other cities and towns on the same body of water. Certain river cities in Illinois that are suffering from foul water and bad odors are now trying to force the towns upstream to cease turning their unpurified sewage into the



Building a Sewer by Machinery.

river. These cases, in the form of a lawsuit, have been taken before a court.

The Two Systems of Sewerage. — There are two ways of taking care of the storm water and sewage of a city, town, or village. One is the separate system, which provides one set of pipes called storm sewers, for surface water,

and another called sanitary sewers for the liquid house waste, or sewage. The other is the combined system, which carries off both rain water and sewage in one arrangement of underground pipes.

The Separate System.—In the separate system the sanitary sewers collect all water that is made impure by the various uses in the home. Cast-iron pipes are used for this system because they have tight joints. This pipe line is carried quite beyond the city limits to some safe place of discharge, or sewage disposal station. The sewage from houses runs in about the same volume all day, and is about the same in amount as the water that is furnished by the waterworks. So sanitary sewer pipes need not be large because of this regular and continual flow, and all the sewage may be readily purified before being turned into a stream.

The other drain or storm sewer carries only rain water, chiefly from roofs and streets; but as storm water is less dangerous to health than house sewage, the pipes need not be water tight and they may safely flow into some near-by stream or river. Because the joints are not tight, the underground water that has soaked down through the gardens and lawns seeps into the storm sewer, and in this way the entire district is drained. Storm sewers need to be very large to carry off heavy rainfalls quickly. If they are less than thirty inches in diameter, they are made of vitrified clay pipes. Larger sizes are made of brick, stone, or concrete.

The Combined System.—The sewer pipes of the combined system must be water tight; and because of storm water they must be very large. But if they are large enough to take care of the heaviest rainfalls in a few hours, they are much too large for the best sewage service in dry



Sewage Disposal Plant,

seasons. When a small, shallow, sluggish stream of sewage flows through these large sewers, solid matter is apt to accumulate because the flow is not deep enough. Then a bad odor or sewer gas is created in the pipes. On the other hand, if combined sewers are too small, or if they have too little slope, or fall, they are liable to back up into the basements of houses during heavy storms. The combined sewers have the advantage of being thoroughly flushed or cleaned with every storm without cost to the city, while the separate systems for sewage must be flushed with city water. Combined sewers are sometimes made egg-shaped

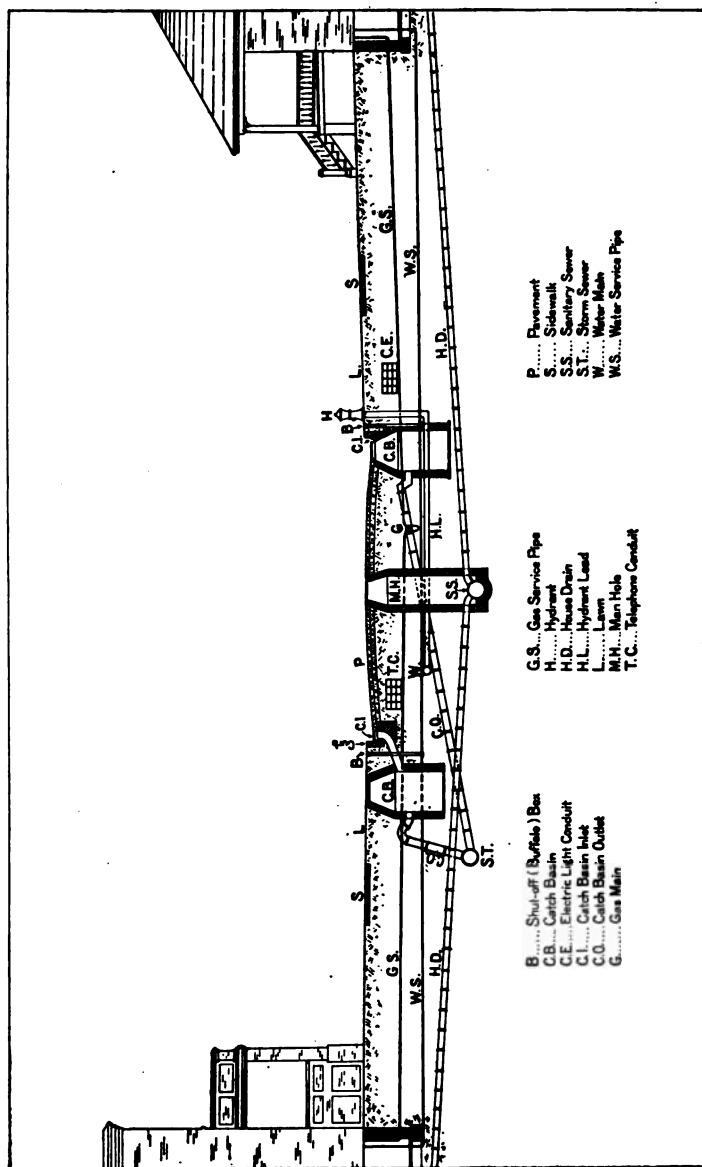


Baltimore — Settling Tanks.

Courtesy of Sewerage Commission, Baltimore

instead of round, with the small curve below so as to make a tiny dry-weather stream deep enough to carry away all its solid matter.

The combined system of sewers has been in common use for many years. It is found in nearly all the large cities of Europe and America. Since the time has come, however, that cities must consider purifying their sewage before discharging it into a river or lake, the separate systems have now become more popular and desirable. The large cities that have sewage purification can only take care of the dry-weather flow, letting all excess in time of storm



Cross Section of a Street showing Underground Pipes for Water, Sewers, Gas, including Catch Basin, Manhole, etc.

overflow into the river without being cleansed. For it is impossible to take care of such a volume of storm water and sewage at once. With the separate sewers the outflow from the smaller sanitary sewers can be readily purified at all times.

Difficulty of Changing Systems. — To change from the combined to the separate systems is almost impossible, because of the enormous cost. The only way is to use the present combined system of pipes for storm water only, and to install an extra system of sanitary sewers, the flow of which can easily be purified because of the small amount. The smaller cities that are just installing sewers are using the more modern and scientific plan of separate systems. Baltimore only recently put in its first underground sewer system, so it is the only large city of our country that has separate sewers.

Laying the Sewer Pipes. — The cross section of a street having the separate system is shown in the diagram on page 56. In this figure S.S. is the sanitary sewage pipe and S.T. is the storm-water drain; C.O. are the pipes that carry the storm water from the catch basins C.B. to the storm-water sewers. The catch basins receive the storm waters from the street gutters through the street openings C.I. The pipe G.S. is for gas, and W.S. is for city water.

Manholes. — At the point where two or more sewers unite, an opening is usually made extending up to the surface of the street. This opening, which is called a manhole, is lined with brick and has a cast-iron cover that, as a rule, has many small holes in it to aid in ventilating the sewer. The chief purpose of the manhole is to enable workmen and inspectors to make repairs and to remove any stoppage or obstruction in the sewer. (See M.H., p. 56.)

Street Catch Basins. — In the picture on page 56 you may see under the street gutters deep holes similar to manholes. These are sometimes at the corner and sometimes midway between corners, and are called catch basins because they gather in all refuse that is carried off the street by water. The refuse settles to the bottom of the catch basins, which are regularly cleaned, and the water runs into the sewer. The catch basins prevent the sewers from becoming clogged with street filth.

Sewer Traps. — Sewer gas is kept from coming up the pipes into our houses by sewer traps. These are bends in the pipe, where water stands to prevent the harmful gases from getting by. You will notice these traps under wash basins, under kitchen sinks, bathtubs, stationary wash-tubs, and in other plumbing. They protect the house from bad odors as well as poisonous gases. An escape pipe is usually arranged to lead off from below these traps, where the gas accumulates. This pipe extends up through the roof and carries off all unpleasant odors.

The Problem of Sewage Purification. — The knowledge that sewage is the main avenue for the spread of typhoid fever is forcing upon cities the need of knowledge as to the treatment of sewage, so as to purify it before discharging it into streams. Since the opening of the drainage canal in 1900, the death rate from typhoid in Chicago has decreased to such an extent that up to January, 1912, there has been a saving of 13,238 lives. This is explained by the fact that there has been no sewage in the Chicago water since 1900. But though the drainage canal protects Chicago from its own sewage, it exposes other cities along the Illinois River that use river water.

Methods of Treating Sewage. — There are two methods of treating sewage to rid it of its danger. There is in sew-

age a certain amount of fertilizer, and for many years the entire sewage of some towns has been used to irrigate and fertilize large farms outside the city. Fine crops are raised, and at the same time the sewage is freed from harm. The city of Pasadena has a great sewage farm, where about 500 acres have been cultivated in one year. In winter the sewage has been used to grow English walnuts and in the summer, vegetables. Salt Lake City, Redlands, and other towns located in warm, dry, sandy regions have their sewage farms that both take care of sewage in a sanitary manner and raise large crops besides. But many climates cannot raise crops all the year round. What is to be done with the sewage when the ground is frozen? Larger cities cannot resort to this method because of the high cost of land near the city limits. To dispose of sewage by irrigation requires one acre of ground for every 150 people. On this basis New York City would need an immense farm about eight miles square.

Another method in which great hopes were placed was to treat the sewage with chemicals that killed the dangerous bacteria or microbes in it. But this method, besides being very costly, has not proved entirely satisfactory.

Recent Methods of Purification. — Then came the wonderful discovery that the sewage contained another kind of bacteria that would themselves purify the sewage if they were allowed to multiply and work upon it. These bacteria have been purifying sewage since the world began, but they cannot, without some assistance, take care of such enormous volume as our cities give forth. Some of these friendly bacteria seem to work best in the dark and without air, while others thrive best in air.

How to make conditions right for these different bacteria which are man's friends has been fairly well solved

by many towns in this way: the sewage flows into enormous closed tanks in which the solid matter, or sludge, settles to the bottom, where it is quiet, dark, and airless. Here the bacteria work upon the sludge for a time. Then it is blown out of the bottom and put on a drying bed, where it becomes harmless.

The liquid of the sewage, which still contains disease germs, is sprinkled or sprayed upon great beds of coke or sand and gravel, called "contact beds," which contain plenty of air. Every few feet a spray appears just above the surface of the bed. In appearance, the bed resembles a countless number of lawn sprinklers in operation. Here the helpful bacteria that require plenty of air multiply and work on the liquid waste as it trickles through the bed. They either kill the typhoid microbes or rob them of their food. Sometimes the liquid is passed through two or three of these beds before all the disease microbes are removed by death or starvation. After this, the purified liquid, freed from disease germs, may flow into streams without polluting the water or endangering the health of the people who use it.

The "contact beds" may be used the year round, because the sewage comes from the pipes warm enough to prevent any freezing. There must be several beds, so that each may have periods of rest in order that abundance of air may be again introduced to aid the friendly bacteria. It is said that this system purifies sewage without a stench. It is the most up-to-date method, but it is expensive and difficult to keep the beds in good condition. Better plans will doubtless be found in the future, or improvements will be made on methods used to-day.

The Sewage of Coast Cities. — If a city stands upon the seashore, it may discharge its sewage into the ocean.

But even this method causes unpleasantness, because the waves wash some of the waste ashore; and if there are beaches for bathing, they are spoiled. Some coast cities are now using settling tanks to collect all solid matter, and are then piping the liquid to some distance out into the lake or sea. In this case there is left only the problem of disposing of the settlings, or sludge.

London Sewage. — To get some idea of the task of caring for the sewage of a great city we will take London as an example. That city has about a thousand men in charge of the sewage disposal. The sewers drain 140 square miles of territory, having a population of about six million people. The sewer system carries away 230 million gallons of sewage every day. This sewage is treated with lime and sulphate of iron, which cause all solid matter to settle. The liquid is then discharged into the river, flowing thence into the sea. The sludge, 48,000 tons a week, is carried out to deep sea in six sludge vessels owned by the city. Each vessel carries a thousand tons at a load. The sludge sent out to sea in one year would cover 400 acres five feet deep. There are about 850 miles of sewer pipe in London. Many of these pipes are from nine to eleven feet in diameter. The expense of caring for the sewage of this great city is a million dollars a year, besides a cost of forty million dollars for building sewers. The city flushes all sewers twice a year to keep them clean and to protect the health of the people.

QUESTIONS ON THE TEXT

1. Why is sewage dangerous to health? 2. Describe the sewerage system of a large city. 3. Why should some cities purify their sewage? 4. What are the two types of sewer systems? 5. Which is better and why? 6. What is the use of manholes? 7. What are street catch basins for? 8. What are sewer traps for? 9. What

are sewage irrigation farms? 10. What cities use them? 11. What objection is there to chemical treatment of sewage? 12. Describe the most modern methods of sewage disposal. 13. What advantages have coast cities in this matter?

QUESTIONS ON YOUR HOME CITY

14. Describe your sewerage system. 15. Into what does it drain? 16. Does your city purify its sewage? 17. Has your city separate or combined sewers? 18. Would a sewage farm work satisfactorily for your city? 19. How many sewer traps in your home? 20. Explain the use of all underground pipes on page 56. 21. How many pipes extend through your roof and what purpose do they serve?

CHAPTER VI

THE DISPOSAL OF GARBAGE AND RUBBISH

City Waste. — There are, besides sewage, some other kinds of waste that must be disposed of for the sake of health. Garbage cannot be carried like sewage by underground pipes. In the past it was allowed to accumulate in vile-smelling boxes, barrels, or cans to be scattered about by dogs, cats, and rats until it was removed by some cartman.

By "garbage" is usually meant all kitchen scraps and food waste of meat and vegetables, besides all animal and vegetable matters from houses, stores, and markets. "Refuse," or rubbish, includes pieces of wood, paper, straw, rags, mattresses, broken furniture, house sweepings, and old clothing; also glass, iron, tin cans, and crockery. Old rags and clothing often spread disease among the sorters and rag pickers. Ashes, including cinders, is the cleanest of all city waste and the most sanitary, if kept from the winds. In most cities dead animals, such as the carcasses of horses, cattle, and dogs, are hauled away in special wagons built for the purpose by private persons who operate rendering works. Either the town or the owner pays for their disposal. During the year 1911 the contractor removed from the streets and alleys of Chicago 8956 dead horses, 27,841 dogs, and 7 cows.

Primitive Method of Disposal. — In places where families live some distance apart it is an easy matter to get rid of waste because of the small amount. Garbage is usually

either fed to swine or fowls, dumped on the nearest vacant ground, into near-by swamps, or into the nearest stream or ocean bay. The chief object is to get this waste matter out of sight with the least cost and trouble.

In villages in former days each family kept a pig or two which were fed on the food refuse and scraps from the kitchen. These animals were slaughtered for food at the approach of winter. But as the villages grew and more people crowded into the town limits, it became impossible to dispose of garbage in this way. It was then given to garbage men who took it away and sold it to farmers as food for stock. These garbage men did not collect it regularly or evenly over the city, and the spoiling kitchen refuse that remained became a nuisance.

Up to 1884 Boston sold all the kitchen refuse to farmers in the state, to whom it was carried by wagon or train. Other cities in New England each owned a hog farm. The town bought or raised its own pigs, which were fattened on the garbage and sold. In the year 1903, Worcester sold from the city hog farm pork, pigs, and tallow to the amount of \$12,000. The cost of collecting the garbage was about \$18,000, so the city lacked only about \$6000 of paying the entire cost of its garbage disposal.

But there are several objections to this economical plan. Hogs fed on such garbage are more likely than others to cause among people that eat the pork a disease called "trichinosis." Moreover, when large amounts of city garbage are dumped on open fields for feeding in hot weather the sight and odor are both disagreeable and unsanitary. Clouds of flies and insects and other lower living things multiply in the heaps of spoiling refuse. Certain modern cities, however, still dispose of their garbage by feeding it to hogs, and there is but little complaint of this method.

Garbage in Modern Villages. — In the smaller towns and villages of to-day that make no effort to care for garbage, vacant lots are often used as dumping grounds for all sorts of refuse. The dumps contain matter which gives off noxious odors under the hot summer sun, and they are both unsightly and unhealthy. The cartmen, when no law hinders, select the nearest place to unload; generally a valley or ravine is a favorite place to dump. Such unsightly spots are sure to drive away people who are looking for a home in a clean and healthful city, while the poorer townspeople are compelled to live and rear their families in these unsanitary surroundings. As disease from these families is likely to reach other citizens of the town, the matter is a vital one to all. Burial in the earth disposes of garbage in a much safer manner; but when people are crowded together in large cities, there is no convenient place for the burial of garbage. The land about the city is too valuable, and available ground is too distant.

Removal Systems. — *The License System.* — When enough citizens complain of the garbage dumps, town authorities usually make laws or ordinances placing this matter under the direction of a health officer. He may license certain cartmen to collect and remove all the waste from the premises of people who will pay him for the service. This is known as the "license system." It is not wholly satisfactory, in that the careful man is not protected from his careless neighbor, who, instead of paying for its removal, permits his garbage to pile up in the alleys and yards until it is a nuisance. Now people are beginning to see that in order to have this work done well they must tax themselves to pay for it. With tax money the city may hire a contractor to dispose of all garbage in the city.

The Contract System. — The contract system is better

than the license system because the contractor is responsible to the city government for the removal of all the garbage from the city for a year or a term of years, and the city can refuse to pay him if the work is not satisfactory. The garbage is collected daily, or every other day, in the thickly settled parts of town, and perhaps twice a week in other sections. Since the contractor seldom gets enough profit to enable him to give the best service, he ordinarily does as little as he dares to make sure of his pay.

The Municipal. — In other places the town does all the work with its own teams and wagons and its own employees or workmen. This is known as the "municipal system." It means great expense in providing teams, tools, and other equipment; but it is the most satisfactory. There are an increasing number of cities that own their own garbage equipment and plants. Some cities take care of part of the waste and let the rest out to a contractor or company. Prior to 1914, Chicago collected the garbage in city wagons and turned it over to a private company for disposal, while the ashes were collected by hired teams and wagons.

Garbage Collection. — In most American towns householders are required to put garbage and ashes in separate cans. Where the best sanitary methods are observed, garbage is placed in metal cans with covers. This should be collected at night in water-tight steel garbage wagons that have covers of metal or canvas to keep the odors under control in hot weather. Garbage wagons ought to move slowly to keep from spreading dust and disturbing the sleeping city.

Garbage Disposal. — There is some value in garbage as a fertilizer for poor soils. Many American towns have tried the plan of plowing it under to raise crops, but they have not long continued it. Large areas of suitable land are

seldom found in the vicinity of cities. Besides, the soil must have time to take care of, or digest, green garbage, because certain elements which it contains are harmful.

Burning and reduction are the two safe and sanitary methods of disposing of separate or green garbage. Garbage is burned in different kinds of furnaces. Some of these, called crematories, require a great deal of coal to complete the combustion of the wet garbage. The ordinary crematories do not have high enough temperatures to burn all the gases, so the odors from the plants become a nuisance to neighboring dwellings. Various American cities have tried the crematories and found this method of disposing of garbage both expensive and unsatisfactory.

In Europe, where rubbish, ashes, and garbage are usually collected in the same can, a type of furnace is made that secures a temperature high enough to make the garbage burn itself without the use of extra coal aside from the unburnt coal of the ashes. These furnaces are called destructors. They not only destroy the garbage along with its gases and smoke, but they furnish power, heat, and light to sell; and thus they pay nearly all expense of garbage disposal. A forced draft in the furnace secures this high temperature. Air is pumped in to force a hotter fire than the mere draft of an ordinary chimney would produce, in the same manner as the blacksmith uses his bellows to make his fire burn faster. It is easier to burn the garbage in Europe because it is said to have far less water than that in this country.

The European destructors are being used in a measure in our country. As they give off no odors, they may be built centrally in the town, so that the garbage need not be hauled great distances, thus reducing the cost of collection. Besides the burning of garbage, these plants supply

power for running dynamos which furnish electricity for different purposes. Frequently enough power is sold by the plant to more than meet the cost of destroying the garbage. This, however, does not include the cost of collection. Seattle, Vancouver, New Brighton, New York, and many other cities have destructors that are satisfactory. They thoroughly destroy all garbage, they breed no flies, and they do away with all microbes and bacteria. A city may have a number of such plants so located as to shorten the cartage of garbage. In addition to returning a profit to the city from the sale of power, light, and heat, they sell clean ashes and cinders for concrete work and for filling depressions and constructing road work. San Francisco has also recently adopted the English mode of burning garbage, and the city owns its own incinerators.

Reclaiming Waste Land. — Seattle has led the way among American cities in proving the value of refuse for building up farm land. Seattle covers a great area, and the city had been compelled to erect incinerators in different sections to save cartage.

Commissioner Crichton tried the new plan. He selected some low-lying land that was of little use for crops and upon this refuse was dumped to a depth of about three feet. In order to prevent the breeding of flies and mosquitoes, the refuse was then sprayed thoroughly with antiseptic. The refuse-covered land was then overspread with sand or clinker and ashes so the air could enter to aid decay. Bottles, tin cans, boxes, straw and paper had been scattered among the refuse for the very purpose of letting in air. At the end of three months the whole mass, including even the tin cans, had disintegrated and become rich soil. Grass was then sown on this land and a fine crop was the result.

Many small towns in that state have since followed the



Courtesy of Dept. of Street Cleaning, New York City.

Refuse dumped on Scows to be taken to Land Fills, New York.

method of Seattle. There is much low waste land about hundreds of American cities that should be reclaimed in this manner.

Reduction of Garbage. — Some men maintain that it is a serious waste to burn garbage because it contains elements that the world needs. So there are in our land to-day many reduction plants which, instead of burning, separate the garbage into grease and fertilizer, both of which may be sold. The average ton of mixed garbage contains about 60 pounds of grease, 1420 pounds of water, 100 pounds of rubbish, and 400 pounds of tankage. The rubbish is composed of bottles, tin cans, rags, bits of wood, glass, shells, iron, and the like. Tin cans are worth about five dollars per ton; the iron is often melted and made into sash weights; unbroken bottles may be cleaned and sold for about four cents a dozen to junk dealers to be refilled with cheap ketchup, oils, and other food products. The broken glass may also be separated and sold at about four dollars per ton. Rags are washed, dried, and sold at half a cent a pound to make paper.

The sixty pounds of grease in the ton of garbage has the greatest value of any of the products of reduction. It is of a low grade and sells for three or four cents a pound. Most of it is sent to Belgium or France, where it is made into soap, candles, or axlegrease; and some of it is probably sent back in this form. The tankage is the solid material left after the water and grease and refuse have been removed. Tankage contains some plant food and is usually sold to manufacturers of farm fertilizers.

Disposal of Rubbish and Ashes. — Where refuse or rubbish is collected apart from the garbage and ashes, it is often sorted for market before the useless matter is burned. In such cases the rubbish is all thrown on a long, moving,

endless belt or inclined elevator with men and boys ranged on each side. One picks out brown paper, another white, another rags, still another metal substances, and so on. What remains is carried on by the belt and dumped into the furnace which gives power to light the building, run the belt, and possibly furnishes a surplus of power for sale.

The ashes of most cities in England are disposed of with the garbage and rubbish. But in the larger number of cities in America the ashes are collected separately and used only for filling in low places and grading streets. In cities that use hard coal there is much good fuel left in the ashes, and this may be easily and profitably separated by machinery.

The Best Disposal Plant. — On the whole a small city or town finds that the best disposal system of garbage is by burning. Only the high temperature furnace or destructor should be used, because the other kind fails to burn the gases and smoke, and requires too much fuel. It takes a city of at least 100,000 people to furnish enough garbage for using the reduction plan to advantage.

City-owned Plants. — If the voters were not so indifferent about choosing proper men to manage city affairs, it would be best for all municipalities to own their own garbage plants. Prior to 1913, Chicago collected the garbage and paid \$47,500 a year to the private reduction plant that disposed of it. The city of Cleveland owns its own reduction plant, which is a marked success. This is true of San Francisco. Other cities hesitate to undertake public ownership, because they know the danger when such things are dragged into politics and untrained politicians undertake to do the work that only trained experts should attempt.

QUESTIONS ON THE TEXT

1. What is meant by garbage? 2. How is it disposed of in small towns? 3. What is the license system? 4. What is the contract system? 5. What is the municipal system of garbage disposal? 6. What are some good rules about collection? 7. Does garbage make good fertilizer? 8. What are destructors? 9. How do they differ from crematories? 10. What is meant by reduction of garbage?

QUESTIONS ON YOUR HOME CITY

11. Does your city collect and dispose of the garbage or is it given out by contract? 12. How often is your garbage collected? 13. Are ashes collected separately? 14. How are the ashes and the garbage disposed of? 15. Is this a satisfactory method? 16. What is the yearly cost to your city of the collection and disposal of garbage?

CHAPTER VII

THE CLEANING OF CITY STREETS

Why Clean Streets? — Filthy streets are a disgrace to any city. They put the stamp of failure on both the city government and the people who are responsible for it. Clean streets add to the health and comfort of the citizens and make the city more attractive. This induces desirable people to make their homes there. In our more crowded cities, children often have no other playground than the street. In the closely built sections, it is the only breathing place for grown-ups as well as children.

Street Cleaning. — Dirt may be gathered from the streets and boulevards either by hand brooms or by machine brooms. Machines do satisfactory work on smooth pavements like asphalt, brick, and smooth stone blocks; but on rough and uneven pavements where macadam is used, hand sweeping is necessary.

Where a city does the work, or where it is let out by contract, the street cleaning is usually done in the following manner: There are two shifts of men, the day shift and the night shift. The day shift are the men in white who patrol the streets during the day, sweeping up droppings and refuse. The night shift of the street-cleaning department does not begin its work as a usual thing till nine or ten o'clock. This shift does the thorough cleaning of the streets. First the street is sprinkled heavily. The sprinkler is followed by a horse-drawn rotary sweeper which pushes all the refuse into the gutter. Men with brooms

and shovels gather the refuse into piles and it is carted away in wagons.

There are some objections to the machine broom. If the sprinkling is too heavy, mud is formed and thrown about when it revolves. For this reason machines cannot be satisfactorily used in hot weather when the dust is troublesome. Other machines have been invented that sweep up the dirt automatically and load it on a wagon. Some of them use suction or the vacuum method.



Courtesy Dept. of Street Cleaning, New York City.
Street Sweeper at Work, New York..

Hand sweeping is done either by day or by night, except in the business sections where an attempt is being made to keep the streets clean all the time. In this case, one man is assigned a certain length of road to keep clean. He is provided with a can or bag mounted on two wheels and a broad shovel and short-handled broom. If a bag is used it is closed when full and left on the curb to be hauled away. The use of bags prevents the dust that is created

when cans are emptied into carts along the streets. Sometimes the dust is merely swept into piles at the curb line. Such heaps of dust are liable to be scattered by the wind before the wagon arrives to remove them.

In Paris and other cities of Europe, as well as in some American cities, the streets are regularly flushed or washed with water. The flusher is a large tank wagon with gasoline power which forces the water upon the street with sufficient power to wash the refuse into the gutter, where men with brooms sweep the filth along into the storm sewers. It would be well if our cities also practiced this method on asphalt streets and on such brick pavements as have waterproof cemented joints. Brick streets with sand-filled joints cannot be flushed because the sand is so easily washed out. One method of flushing streets is by pouring on water freely and following with the broom before the water has had time to flow away. Another way is swilling down with the large hose, using the force of the water to remove all dirt; but this plan is apt to wear streets that have holes or cracks to be washed out.

The Dust Nuisance. — The prevention of dust on city streets has always been a difficult task. Since automobiles have become so common, the nuisance of dust has greatly increased. The fast-revolving wheels of these cars appear to suck up the dust and dirt from all cracks and joints of the pavement and send it whirling in the air. Automobiles wear away and grind up the surface of streets, and this dust, together with that from ashes, leaves, and manure, soon becomes intolerable. It is blown into houses, offices, and stores, soiling furniture, books, and clothing, and making people grimy and uncomfortable.

The usual way of laying dust is by sprinkling with water. This plan is costly, as it has to be repeated six or eight times

a day in dry weather. In coast cities salt water has been tried, but it proved unsatisfactory because the salty mud injured clothes and vehicles and the dust was irritating to eyes and throats. Some kinds of pavements give forth less dust than others and so need less attention.

In very dry seasons macadam streets must either be sprinkled regularly to keep down the dust, or oil or tarvia must be applied. Tarvia needs to be spread but once for a season. It not only keeps down all dust, but it helps to bind the surface materials and to make macadam roads wear better by giving them a harder surface. Oil or tarvia can be used to keep down dust, and are as cheap as water, because of the frequency with which the latter needs to be applied in the dry season. There are other methods of laying dust. Chemicals that draw moisture from the air and so keep the street surface moist are used very successfully. Heavy rains, however, are likely to wash such substances away before the close of the season.

Snow Removal. — In northern climates snow must be removed from the business streets in winter, as it delays traffic and interferes with trade. When the snow begins to melt, the gutters must be cleared so the waste may run into the sewers. This generally means the calling out and managing of an entirely new force of men and teams. Sometimes the entire work is given over to a contractor for a fixed payment of money. The snow must be dumped in as convenient a place as is possible in order to save the cost of a long cartage. It is often thrown into rivers or lakes, if they are convenient; otherwise vacant lots are used. To undertake to melt such a great amount of snow as frequently falls would be very expensive.

QUESTIONS ON THE TEXT

1. How does the work of the day system of street cleaning differ from the night work? 2. What are the advantages and objections to flushing streets? 3. What relation is there between dust and health? 4. How do different cities solve the dust problem in summer? 5. What are the advantages of oiling streets? 6. Are there objections to oiling? 7. What can be said in favor of tarvia?

QUESTIONS ON YOUR HOME CITY

8. How are your streets cleaned? 9. Are night workmen used? 10. Has your city a rotary sweeper? 11. What other up-to-date appliances has the city? 12. How does your city keep down the dust in summer? 13. What other method might it use?

CHAPTER VIII

CITY HOUSING

Homes or Tenements? — There is one question that a growing city must answer promptly, or the opportunity is lost forever. It is whether the city shall remain a city of homes or shall become what our largest city now is, a city of tenements. Men and women who have spent years



Courtesy Tenement House Dept., New York City.

A Modern Tenement, New York.

in the study of housing declare that a tenement house is vastly inferior to the single family house and that it can never be in the same sense a home. Tenements can be made sanitary. The tenements of New York are to-day more sanitary than many of the wretched shacks that

shelter the poorer people of some of our smaller cities and towns. Tenements do afford convenient shelter for broken families and for families without children. But no city can afford to allow the convenience of broken families to lead to the adoption of the tenement habit for the great body of its working population. The city of Cleveland has won fame throughout our country for the way it has warded off the tenement and provided proper housing for its people.

Mr. Henry Vivian, who has done so much for proper housing in England, recently made a tour of the cities of the United States. He said it was deplorable that cities were continuing to pack their inhabitants in tiers in tenements. No city, he declared, ought to allow any further erection of tenements. They destroy strength of character and imagination, and the children living in them lose the capacity for self-development and for carving out their own lives.

"If we could put a ring around the average city like Chicago or Liverpool for a few years," said Mr. Vivian, "stopping the supply of good blood from the country districts, those great cities would all go down, they would dwindle and die. Out of 11,000 men from Manchester who offered to enlist in the British army only 1000 were found to be physically fit for the soldier life. People must not lose contact with fresh air and nature. We must see to it that our cities shall be health-producing."

Slum Conditions. — We commonly think that only large cities have slums, but working people, as a rule, are badly housed. Thousands of poor people in smaller cities do not have in their homes sufficient sunlight, pure air, and good water. What are thought to be "just old houses" where poor people live are in reality slums. Even in our villages

may be found inhabited houses that would be a disgrace to a crowded city. Such slums are found in every state in the Union. Outside our large cities are beautiful suburbs where well-to-do city people live, yet even here slums of the worst sort have been discovered, mere shacks that shelter the poorer people who serve the needs of their wealthy neighbors.

The most common evil found in the homes of the poor is lack of water, drainage, and sewerage. In many cases several families depend upon one cistern, which is often uncovered and polluted by trash as well as by seep water from the undrained yard vaults. In one of our cities twenty families in one tenement had to carry all their water from a fountain a square away. This is a serious bar to cleanliness. The yards are often undrained and are sodden and foul smelling. Old suds and dishwater are standing in slimy pools covered with scum. Tiny backyards are piled up with ashes, garbage, and rubbish, and there are often filthy yard closets which spread disease germs by means of swarms of flies that go back and forth from the kitchen. From such conditions spring chills, fever, and typhoid.

Bad Housing. — Any condition of housing that impairs the physical or moral health of the tenant, or that is unsanitary and a menace to the community, is bad housing.

It is often in the old, decayed, and dilapidated house that the poor must live. The older the house, the filthier it gets. As it goes from bad to worse it draws a poorer and lower class of tenants, until it becomes a shack. Then a slum district starts around it. Each tenant leaves a layer of dirt, and countless germs gather in the loose cracks of the woodwork and broken plastering. Many of the houses are low and damp, sometimes they are built flat on the

ground. Even in villages, rooms are found without windows, and few of the houses have even fair ventilation. In many instances families live in damp and filthy basements.

In a certain town, houses of five rooms or less have from ten to twenty boarders. Here one consumptive could spread the disease among all. In another house seventeen



Bad Housing.

men, one woman, and two children were found living in two rooms. In another case nine men had two rooms, one of which had no window. In a closet in this room six feet long and thirty inches wide, a man was lying asleep with the door locked.

In all American cities where a large foreign population have settled there is overcrowding of rooms, especially among Italians, Poles, and Russians. Sometimes ten or fifteen people live in one room. The crowding is seldom due

to the large family so much as to lodgers and boarders. Single men who have just arrived from Europe and have not yet learned the language are here to earn and save as much as possible so that they may soon return to their native soil. They will live in almost any manner. But men who have studied the housing evil with this in view declare that such overcrowding is, in most cases, caused by greed rather than by necessity. Our foreign immigrants desire to add penny to penny and dollar to dollar as rapidly as possible by sharing their small quarters with lodgers, and they neither know nor care what effect it will have on them or the community.

On the other hand, there are many families that are forced to crowd their living quarters because of high rents. The men may not be earning because of illness or they may be out of work, and it is necessary to take in lodgers to keep the family from starving. Widows with families dependent on their own efforts are forced to live in basements where the rent is cheap in order to have cover for their heads.

Effect of Slum Life on Health and Character. — Sickness is nearly always found in the slum tenement. The wonder is how any one can ever be well, living in such dark places and breathing such foul air. In the dark, damp rooms, disease germs live and multiply, because there is no sunlight and pure air to destroy them. Tuberculosis, typhoid, colds, chills, and fevers all take their toll of life. Four miles from the workingmen's district in Birmingham, England, is the model industrial town of Bournville. Out of every thousand children born in Birmingham, 331 babies die. Out of every thousand born in Bournville, only 65 die.

“The most pitiful victim of city life is not the slum

child who dies, but the slum child that lives. Every time a baby dies the nation loses a prospective citizen, but in every slum child that lives the nation has a probable consumptive and a possible criminal." "You can't let people live like pigs and expect them to be good citizens," said Jacob Riis. What hope is there from the slum voter? Here is found the home of the criminal, and the weak-minded classes that cost the state hundreds of thousands of dollars annually. Yet we are allowing slums to grow up about us at a greater rate every year.

Effect of the Slum on the City. — Disease originating in the slums, spreads to all parts of the city. The well-to-do are not secure, for there are many ways of scattering the contagion. Certain diseases are known to spread through a community by means of garments made in sweat shops, by rats and mice, by flies and fleas. Children from clean homes and slum children sit side by side at school, and filth and disease poison the bodies. The foul language and bad habits of the neglected children poison the minds of those that are carefully reared. On the streets and in crowded buildings and street cars, the slum dweller touches elbows with the clean citizen, and the germs are carried home. The slums poison an entire town.

Curing the Slum Evils. — To remedy the slum evil of room crowding has been a difficult matter, because people deny that they keep lodgers. An attempt was made in New York some years ago to bring offenders to punishment. Policemen in squads were sent out to make night inspections in those tenements where overcrowding was suspected. The policemen would enter the halls of the tenement and knock at the door. When the occupants asked what was wanted, they were told to open the door to the police. After a long delay and some noise, the door was opened and

the police usually found only the family. But before the door opened the lodgers had all passed out of the window to the fire escape, where they remained concealed until the police departed and allowed them to go back to their sleeping places on the floor.

Thinking people are coming to believe that the landlord who owns and rents these slum houses must be held respon-



Courtesy Dept. of Public Health, Philadelphia.

Workmen's Houses, Philadelphia. Doing away with Slums.

sible for bad conditions. "A man has as much right to kill another man in the street with an ax as he has to kill him with a bad house." Collecting rent from the dwellers of foul tenements is like taking blood money.

The Tenement is not a Necessity. — New York, it is true, is a city of tenements. No other type of building is now possible there except in outlying districts. But there is no other city in America where the tenement house is a necessity as the chief type of dwelling for the working popu-

lation. Chicago has, in recent years, built many tenements, but the small house is still practicable there. Where land values are high, one-family houses for working people may be built in rows close together at such a cost as to put them within the reach of a workingman. This plan has been followed with marked success in Philadelphia, where tenements have been kept out. What Philadelphia has done, every city, save New York and possibly Boston, can do.

But where tenements do exist, there should be regulations providing air and light. In a city like New York it is impossible to limit the height of future non-fire-proof tenement houses to three or four stories. The land values demand that they be built six stories high. Yet in most American cities land values are not so high but that it is possible to limit such buildings to three, or at most, four stories.

In New York it is not possible to require more than thirty per cent of the lot for open space because of the high cost of land; but in other cities forty or even fifty per cent of the lot should be left free of buildings. The smaller the city, the larger should be the free space about each dwelling. The best way to insure health is to prevent buildings being crowded together and to provide every inch of light and air possible for every human being.

Housing Laws and Recent Advances. — The housing laws of most states are of little consequence, because they are not rigid enough to be effective. In most cases the only requirement is that there shall not be less than a certain amount of cubic air space for each occupant of a room. Far more important than the amount of air space, is the kind and quality of air and how frequently it is changed. A small room well lighted and ventilated is far more desirable than a large one where the air is dead and unchanged from day to day.

But there are steps being made to better things. Our larger cities are making stricter laws governing the new buildings that are put up. In other places there are housing associations that are constructing good houses at moderate cost and renting them to workingmen on very reasonable terms.

QUESTIONS ON THE TEXT

1. What are the objections to tenements? 2. What did Henry Vivian say of tenements? 3. Are there slums in small cities? 4. Are all tenements slums? 5. What are the most common faults of bad housing? 6. What makes a dilapidated house dangerous to health? 7. What two things are most needed in slum districts? 8. What did Jacob Riis say about slums and citizens? 9. What bearing have slums on contagion? 10. What laws could you suggest which would lessen the danger from slums?

QUESTIONS ON YOUR HOME CITY

11. Has your city tenements? 12. Has it any slums? 13. Do you know of any old houses where people live in filth? 14. Did you ever hear of tubercular persons living in them? 15. Do the landlords of your city provide light and air in their renting apartments? 16. Do you ventilate your bedroom every night?

CHAPTER IX

THE PROBLEM OF THE POOR

Wealth Unequally Distributed. — Since the invention of the steam engine, the world has made great industrial progress, and wealth has increased enormously. With this has come a higher standard of living. People now have a great many comforts and luxuries that were not dreamed of in the days of Washington. There is enough wealth in the world to-day, if it were well distributed, to enable everybody to live comfortably; but this is far from being the case. Some have a thousand times as much as they can use, while others must go through life hungry, poorly clad, and suffering from real need.

The Needy. — Many a family that cannot earn enough to support itself is supplied by relatives or by neighbors. These do not apply to the city for aid. But needy families and individuals who have neither relatives nor friends to help them keep hunger away must appeal to strangers. This we call begging or asking for alms. It is of vital concern to the community.

There are many classes of people who do not make a living. Some are paupers who are lazy and shiftless. They find it easier to ask alms than to work. Others are drunkards who spend their money for liquor, leaving their families to suffer. Still other people are so dishonest that they cannot long hold a position; some disobey orders or quarrel with their employers and are thrown out of work. Many times sickness or the death of a member of the family

leaves the others in want and unable to earn the necessities of life.

Worst of all, there are many worthy and industrious citizens who have been thrown out of work through no fault of their own. They have been dropped from the payroll because business is dull or because the firm has failed or gone into another line of business for which the former employees are unfitted. Some workers are let out because of old age or because a younger man has been found who can do the work better. Often a man fails in business and is left discouraged, penniless, and in poor health. Some families suffer because of strikes; others who are fully employed are so poorly paid that they need assistance; and still other workers suffer injury and therefore cease to earn.

Needy people do not all come from one class or occupation: they come from the learned professions, from the merchant or clerical classes, from skilled and unskilled artisans. Every race, religion, color, and nationality are represented among those who apply to the city for aid.

Methods of Relief. — The purpose of charity or of a wise relief policy is to give the children of the dependent classes a chance to rise above the surroundings of their parents and so to become self-respecting and self-supporting members of society. It gives those who are sick or disabled a chance to regain health or to live with less suffering under more kindly care. It provides for the aged and infirm and for the insane a suitable home. The city or the county usually provides hospitals for the sick and injured, where the poor receive medical treatment free. The insane and feeble-minded are also cared for in special institutions provided by the state.

Charitable relief may be furnished in many other ways.

It may be found best to give money, food, fuel, clothing, or tools; it may be that medical treatment or legal advice is most needed. Assistance in finding employment or transportation to another locality may be the aid that is most helpful.

For many years there was little judgment used in relieving the needy. A large number of individuals gave privately and directly to those whom they believed to be deserving. The various churches also collected from their members for distribution to the poor, and there arose in the cities a number of charitable organizations. All of these were private ways of relieving distress. Police, or officers especially chosen for the purpose, doled relief. Amid such confusion the dishonest and crafty beggars waxed fat, because they gathered alms from a dozen or more organizations and individuals, none of which took the trouble to investigate before giving.

When paupers were found to be increasing, the city relief organizations began a system of careful visitation, using paid and trained officials to investigate each case. It was soon discovered that many of the families applying for relief were doing it habitually from year to year, not because of actual need, but because their neighbors were receiving help and they considered it their right. Some undeserving paupers were receiving from a dozen different sources, while hundreds of deserving poor who were too honorable to press their claims received no help whatever.

It was found that much of the giving to charity does more harm than good. So the plan was tried of combining all charity organizations into one body. These investigated all cases carefully, employing trained visitors in the case of each one applying for aid. To decide the merits of the case, it is necessary to know the expenditure neces-

sary to maintain a reasonable standard of living for each family, and how much each member of the family can furnish towards this support.

United Charities. — Thus in recent years there has arisen the movement for a United Charities Association, and many a city now has trained experts to look after charity cases. In some instances the city furnishes part of the funds for this work, but most of it comes from interested citizens. One of the chief endeavors is to prevent charity by visiting the poor in their homes, giving such advice and help as to make people self-supporting through industry, saving habits, and more intelligent buying of family necessities. Men and women who are trained in this relief work condemn the practice of giving to strangers as harmful.

The following are some of the rules of the new charity methods: To examine every case fairly; to give relief only after a careful investigation by visitation and inquiry; to relieve no one except through the visitor of the section in which he lives; to give necessary articles and only enough for immediate needs; to give at the right moment and to change the articles given according to the needs; and to discontinue relieving all who refuse to try to support themselves.

The Tramp. — The problem of dealing with the professional tramp is a troublesome one, because it is difficult to distinguish between genuine tramps and deserving persons who are out of employment. Some towns provide food for these vagrants and send them on to the next town. Many cities keep, during the winter, a poor house or a municipal lodging house for tramps and turn them out on the approach of warm weather. But this is merely dodging the problem, for it gives no chance to test their desire or ability to work.

Certain cities have established wood and stone yards in which tramps are compelled to work to earn at least a part of their support. The number of tramps in such towns is fewer than in those where food is given free.

QUESTIONS ON THE TEXT

1. How do you explain the fact that some people are almost overwhelmed with riches while others are starving? 2. What various classes of people are dependents? 3. Do the poor come from any particular class of people? 4. What two things should one keep in mind in giving alms? 5. What kinds of aid are given the poor? 6. What are the dangers from unorganized charity? 7. What is meant by United Charities?

QUESTIONS ON YOUR HOME CITY

8. What help does your city give to the poor? 9. Have you almshouses? 10. What is done with destitute children? 11. Do you feed tramps at your door? 12. If you do not, why? 13. Does your city or county have agents to visit the homes of those applying for aid?

CHAPTER X

MUNICIPAL MARKETS

The City Market. — Municipal, or city, markets are those built by the city and owned and operated under city ordinances or laws. Not all cities own and operate markets, but nearly all large European cities do, and a number of American cities have introduced them in some measure. These markets are usually housed. In some cities the buildings are costly, valued at many thousands of dollars. Inside there are booths or stands for the sellers. The standholders pay a small rental to the city. Some cities in our country have failed in keeping their market clean and sanitary, but every year the people insist on more attention being given these matters.

There are two kinds of municipal markets. One is the retail market, to which the householders go with baskets to get supplies for their own homes; the other is a wholesale market where grocers, peddlers, and hucksters appear to buy for their trade supplies in large quantities.

The city retail markets where people go with their baskets seem to be a success in many cities, but in others they are not popular and have been abandoned. The reason usually given for this decline is that people sometimes prefer to buy at groceries which deliver at the home door. This saves the housekeeper time and travel or perhaps a carfare, for city markets cannot be so well scattered as to be in walking distance of all the homes. Another reason for the decline of certain retail markets is said to be the truck

peddler who drives about the streets delivering at the door. He has no rent nor market tolls to pay, and can therefore sell more cheaply than those who take their produce to the market. Some of the retail markets in American cities have gradually declined because the people ceased to patronize them. It is natural that grocers and commission men would oppose city markets, because these markets interfere with their business. In some cases where retail markets have been unsuccessful, it may be due to these influences. Wholesale markets are, however, uniformly successful wherever they have been tried.

Care should be taken in locating markets. The wholesale market must be near a railroad terminal or close by the water front, or both, so as to save the extra cartage to the market. Retail markets should be as convenient as possible to the people. They ought to be rigidly controlled by city officers, to make sure that all dealings are fair. The city should furnish correct weights and measures. The rentals must be low, and no one should be allowed to rent a booth and then sublet it to some one else.

What the City Market Accomplishes. — The object of a municipal, or city, market is to aid in getting food and other articles to the people as directly as possible, without the necessity of their passing through the hands of many dealers, or middlemen. Each of these men must have a profit on the goods he handles. Every middleman adds his profits to the price of the product he sells, and the people must pay a higher price for the goods in proportion to the number of middlemen who handle them. Municipal markets, by doing away with middlemen, tend to keep prices down and to furnish the people with supplies fresher than when they pass through so many hands.

In Des Moines the municipal markets have reduced the

price of garden vegetables from one fifth to one half the former price. The producer and consumer come face to face with mutual profit. The man who grew the sweet corn places it in the hands of the housewife who is to serve it on her table. The middleman who would ordinarily take his toll of profit on each dozen ears is ruled out. The farmer gets a little more money and the housewife pays a little less than before.

Most of the cities which conduct municipal markets not only reduce the cost of food supplies to their people, but the city governments realize a good profit on them. Boston's yearly profit has been as much as \$60,000; New Orleans, \$80,000; and scores of other cities, among them Buffalo, Cleveland, Nashville, Indianapolis, and St. Paul, have made handsome profits from their markets.

The Growth of the Movement. — In Rochester, N.Y., the public market has been in operation a number of years and is a marked success. It is said to be patronized by all classes of people, and has reduced the cost of garden truck to the consumer. The old market has become too small, and the people are now looking to a new one.

In spite of some past failures in city retail markets, a goodly number of American cities have recently installed them. Los Angeles, Toledo, and Dayton, Ohio, are among the number. Their citizens patronize the markets well. This demand for retail markets is largely a woman's movement, and a protest against the modern high cost of living. In all cities and districts where markets are properly managed and where people are willing to go with their baskets, municipal markets seem to be very successful.

QUESTIONS ON THE TEXT

1. What are municipal markets? 2. What is their purpose?
3. What two kinds are there? 4. What reason is given for the decline of municipal markets in certain places? 5. What classes of business men would naturally oppose city retail markets? 6. What advantages do such markets afford the people? 7. What locations are best for markets? 8. Why has the desire for municipal markets grown recently? 9. Are markets profitable to the city governments?

QUESTIONS ON YOUR HOME CITY

10. Do you have city markets? 11. What kind? 12. Do all the people patronize your retail markets? 13. Are they kept clean and sanitary? 14. What kind of food can be obtained from them?

CHAPTER XI

SMOKE AND NOISE ABATEMENT

The Smoke Nuisance. — Smoke is the result of only a partial burning of fuel. Tiny bits of light unburned wood or coal are carried into the air by the chimney draft. Soft,



The Smoke Nuisance, showing Need for a Factory Zone.

or bituminous coal, is the chief cause of smoke, and where cities use it in great quantities the smoke becomes a nuisance.

We are not quite sure that black smoke in the air is a direct menace to health; but we know that smoke shuts out the rays of the sun, especially the blue rays that are

needed both by plants and animals for healthy growth. Since sunlight is an enemy of germs and microbes, the less light in a city or home, the more disease.

Besides all this, a smoky or sooty atmosphere discourages personal neatness, for no begrimed citizen can appear at his best or do his best work. A smoky atmosphere makes it difficult to preserve cleanliness in the house or on the street. It interferes with the neat display of merchandise and therefore hinders business. Smoke, like dust, is a cause of fog, because each little grain of smoke or soot gathers moisture, and presently the whole atmosphere is a fog.

The soft-coal smoke from hundreds of railroad engines and the many factories in large cities mars the buildings. They must have their outside walls cleaned regularly in order to present a respectable appearance. It costs from \$500 to \$2000 annually to keep the exterior walls of some of Chicago's skyscrapers clean. If the building is faced with granite or stone of any kind, the cleaning of the rough surface is just so much more diffi-



Courtesy of Atlantic Terra Cotta Co.

Terra-cotta Surfacing.

cult and expensive, for the soot and grease sink into the pores of the stone.

Within the last few years scores of giant buildings have



Courtesy of Atlantic Terra Cotta Co.

Woolworth Building, New York. Terra-cotta Surface easily kept Clean.

been constructed with their outer surface covered with glazed terra-cotta tile, which is as hard and smooth as glass, to guard against the soot. But even these terra-cotta skyscrapers must be washed, and it is an expensive process. When one counts the hundreds of buildings in our large cities, the cost of cleaning, due largely to smoke, is seen to be enormous.

The imperfect burning of soft coal develops a sticky, tarry substance that adheres to the smoothest surface, and it is this greasy coating that clings to the surface of glass windows. The office buildings that have the best light and ventilation are most eagerly sought for, and so the window surface in downtown buildings is increasing all the time. In a great city like Philadelphia or Chicago there are probably 1000 window cleaners

hanging in belts against the sides of skyscrapers endlessly cleaning and polishing windows throughout the year, at a cost of hundreds of thousands of dollars.

Then, too, the sooty atmosphere makes necessary the

recalcimining of all interior walls every year. This costs in large buildings from three to four thousand dollars a year. So it is évident that the item of keeping the business districts of some of the large cities clean from the results of smoke alone will run well above a million dollars annually.

Ways of Diminishing Smoke. — There are three ways of solving the smoke problem. One is by using only those fuels that do not produce smoke, such as hard coal or oil. Another way is to burn the smoke particles before they escape to the air. And still another way is by using certain kinds of furnaces that burn soft coal so completely that little or no smoke is given off.

In the eastern part of our country where hard coal is almost as cheap as soft coal, it is no hardship to require the people to burn only the hard or smokeless kind; but in the Middle West, soft coal is much cheaper and more abundant, and the wide use of it cannot be prohibited. Hard coal is mined only in the East and, aside from the cost of transportation, the supply is not great enough for all American needs.

Oil is employed in Russia as a smokeless fuel, but the supply would fail in this country if it were used in the manufacturing industries. In Texas and on the Pacific coast, oil is used as fuel for railroad engines.

There has been much effort expended in trying to perfect smoke consumers; but on account of the high degree of heat necessary to consume smoke, the problem has not been well solved. Much may be done to bring about a more complete burning of soft coal, and also of the smoke within the furnace. Furnaces are now made with this end in view.

One method of reducing smoke is by feeding the fuel gradually through the use of artificial stokers, instead of

feeding a great bulk at one time. In this way the inrush of cold air to the furnace when the doors are opened is avoided, and much unnecessary smoke is banished. When firemen are examined for a license they may, in time, be required to know how to fire in a way to avoid sending clouds of smoke from their furnaces.

From railroad engines within city limits comes a vast amount of black smoke. In time railroad companies will perhaps build a belt line around the outskirts of each city and send all through-freight cars around the city rather than through it. Then, too, the time is coming when passenger trains will be required to use electric motors within the limits of the large cities. When the freight terminals and warehouses for cars destined for other cities are outside the city limits, much railroad smoke will be eliminated.

The movement for lessening the smoke nuisance has now extended to cities of all classes. A number of the smaller cities have already an ordinance and a smoke inspection officer, while most of the larger cities of our land have grappled with the problem.

In many cases the new smoke ordinances are either too lenient or poorly enforced. Some large cities defeat the whole purpose by exempting locomotives from the law's grip. It has been estimated that 43 per cent of the smoke of Chicago comes from locomotives.

Chicago. — Perhaps the most marked success is being shown by the smoke inspection department of Chicago. Public-spirited citizens here are spending a considerable sum in educating the public and the officials. It was estimated that Chicago lost \$57,000,000 through smoke in the three years preceding 1911, while it was spending only \$143,000 for smoke abatement. Yet with this small expenditure it was believed the smoke was reduced one-third in that time.

Besides chimneys of private residences there are said to be more than 17,000 smokestacks in that city belching forth black smoke. This might be prevented. It would indeed cause much expense to change all these furnaces, but great improvement could be made without radical changes. By electrifying railroads within city limits and building central power and heating plants three-fourths of the smoke would disappear and the sky would be almost clear.

The Prevention of Noise.— Few realize how the frightful noises of city life wear on their nerves. Not only are many lives shortened by it, but the energy of all is depleted to an astonishing degree. Much of this trying, ear-splitting noise might easily be quieted within the city limits. Rough pavements such as granite blocks and cobblestones make a great din. Such paving may be needed on certain streets where the teaming is heavy, but in residence sections asphalt or brick pavements will be found much quieter.

Rubber-tired vehicles and automobiles eliminate some noise. The automobile does away with the sound of the horses' hoofs, but when mufflers are left open they are much worse than other noises. Any one willfully running a motor car or motor cycle with the muffler open should be prosecuted. The open mufflers and horns on motor vehicles tear the night into shreds and are the most common offenders.

Street cars are often our worst noise offenders. Some of them create a maddening sound by rocking on their springs. In other cases the car tracks are allowed to get out of repair, and the people must suffer torture from the noises thus made. This would be remedied by the car companies if the city authorities insisted on quiet. In

our larger cities subways are being built for the purpose of running both passenger and freight cars underground.

In some places loud bells and whistles are forbidden, because nearly every one carries a watch and there is no need of a bell or whistle to call them to church or to work. Churches offend worse in this regard, because they are in the residence sections.

Paris levies a tax on pianos because of the nuisance they may become to the neighbors. Barking dogs may be taxed out of town and howling cats should be taxed no less. Street pianos ought to be banished and the calls of peddlers and hucksters muffled. Graphophones and victrolas are a nuisance in the closely built regions.

QUESTIONS ON THE TEXT

1. Why is smoke unhealthful?
2. What relation is there between smoke and fog?
3. What is smoke?
4. Why is there so much smoke in large cities?
5. What is the cost of keeping a modern skyscraper clean?
6. What kind of material is easiest to keep clean?
7. What element in smoke makes window washing so frequent?
8. What is the effect of a smoky atmosphere on the interior of buildings?
9. Why do eastern cities usually have less smoke than those farther west?
10. What advantage has oil as fuel?
11. How may the smoke in cities be reduced?
12. Why should loud noises be reduced?
13. Suggest some unnecessary noises in cities.

QUESTIONS ON YOUR HOME CITY

14. Is yours a smoky city? Why?
15. Do the exteriors of the buildings in your city need to be cleaned?
16. Find out how often the downtown windows have to be washed.
17. What kind of fuel is most used in the city?
18. What unnecessary noises are allowed?
19. Are there any ordinances against noise?
20. Do you think church bells should be abolished?
21. Are autos and motor cycles careful about noise?

CHAPTER XII

FREIGHT TERMINALS

Railroad Property in Cities. — Some of our large cities are badly riddled by numerous railroad systems with their maze of switches and tracks. These roads control, besides the main tracks, many side tracks near the business center. We cannot blame the railroad companies for this unfortunate condition. Much of their property was wisely acquired in the early days and has come to be extremely valuable. The blame falls upon the city government which has taken no thought of the future growth of their community and made no plans to prevent the railroads being a hindrance to street traffic. The railroad property in many cities blocks the natural spreading of the business and residence sections, and stands in the way of proper planning for the health and convenience of its people. If all the railroads entering a city from one direction were required to run in on parallel tracks on one common right of way, it would remove many of the present difficulties.

In the downtown district of Chicago, the railroads own almost half the land acreage and are naturally unwilling to part with it or share it in any way that might hinder their plans or interfere with their business. These roads must deliver their foreign freight to the city, they must gather up the outgoing freight, and must transfer freight to other lines. Hundreds of factories are scattered over the city territory, and each one wishes a switch track on

which to load its products. It is a great saving of time and teams not to have to haul their goods to a freight house.

If the factories were massed in one section of the city, their outgoing and incoming freight could be handled by a few tracks with greatly reduced cost to the railroads, and far less inconvenience to street traffic and city planning. But since the factories are already here, they must, however widely scattered, have switching accommodations.

Freight Terminal Nuisance. — To provide quick and cheap means of handling goods coming and going by rail, good freight terminals are needed. Thousands of freight cars are hauled into the center of a large city by various railroads, switched to other tracks, and shipped out again unopened. Other cars are shipped in by hundreds, unloaded, and their contents carted through the streets to warehouses. In a few weeks' time or perhaps a few days the contents are carted away again and shipped to another city.

All this adds to the noise, smoke, and congestion of the business district. Much of this trouble might be avoided if a freight and warehouse center were established outside the city limits. Here all goods intended for sale in other cities could be stored, and the freight cars designed for other cities could be switched to the proper roads. The noise and smoke of many freight engines is eliminated when these freight cars are sent around the city rather than through it. Much of the freight intended for the city might be sent in from the freight center through an underground railroad operated by electricity.

To care for the incoming and outgoing freight belonging to the city, between the railroad stations and the heart of the city retail and wholesale districts; to provide the necessary factory switches; and to wipe out, at the same

time, the maze of tracks within the city limits, is an enormous problem.

The present plan, whereby each railroad gathers up its own freight, is an unnecessary expense to the road and an inconvenience to the shipper. If a shipper has a dozen different boxes of goods each destined for a different person



· Congested Freight Terminal, Kansas City.

living at a different point on as many different railroads, he cannot deliver them all at the branch freight station most convenient to him. He must load them on trucks and haul them through the downtown freight district from one terminal freight house to the other until they are distributed. It would be much better for the shipper if he could deliver all his freight at one terminal and have it sent to the proper roads somewhere beyond the city limits.

New Orleans Solves the Problem. — New Orleans was formerly cut up by railroads. Some of them owned the river frontage and there were almost innumerable tracks, yet the shippers were poorly served. There were many complaints to the effect that some parts of the city were better favored than others. With all this network of tracks, the railroads could not handle the freight properly.



Freight Terminal, New Orleans, showing Need for Systematic Arrangement.

This southern metropolis finally banished “gang rule” from the city hall and started an improvement.

Seven miles of water front are now owned and controlled by the city. More than twenty big wharves have been built with public money and fitted with steel warehouses for the storage of freight, and with modern machinery for the quick and easy handling of all kinds of cargoes transported by water.

But still more important to the business and manufac-

turing interests of the city were the railroad freight terminals. The city has planned and built a belt line which runs around the city, tapping all the incoming roads. From this belt line, switches are run to the various factories and to the business and warehouse districts. The incoming freight cars of all the roads are switched beyond the city



Courtesy of Department of Wharves, Docks, and Ferries, Philadelphia.

Southwark Piers, Delaware River, Philadelphia. A Pleasing Contrast to the Ordinary Docks.

limits to the belt line, which delivers them to the proper destination to be unloaded and returned to the road. The out-bound freight of all the railroads is collected by the same belt line with its numerous switches, and delivered to the proper road at the city limits.

A few switching engines collect and distribute all city freight, both car loads and smaller lots, thereby banishing

from the city limits hundreds of half-loaded engines belonging to the separate railroads with their noise and smoke, and greatly reducing the cost to the roads. A city-owned belt railroad treats all shippers alike; it makes the transfer of water and land freight convenient; and it also serves the city in transporting garbage far out into the swamps, where it is dumped to fill up low ground which will later be used as farm lands. In times of flood it serves to carry, in a prompt manner, sand, stone, and other materials to strengthen the dikes, or levees, at the points of danger.

Other Cities Adopt the Plan. — This plan of a belt line has been adopted by Cleveland and Philadelphia, and has solved many transportation problems. It serves the people quickly and fairly; eliminates unnecessary trackage and freight houses; and banishes much of the noise, smoke, and congestion from the downtown city streets.

City Control of Docks and Wharves. — In cities that have water transportation it is important that the docks and wharves be accessible to all railroads. If the river or lake front is controlled by one of the roads, it makes the transfer of goods from water to rail an inconvenient affair. New Orleans, as we have seen, solved this question by city-owned docks, connecting them with the belt line, which serves all the railroads. Chicago is building docks to be owned and controlled by the city, but no arrangement is made to give all the railroads access to it. Philadelphia has also obtained control of nearly a mile of river front, where municipal docks and wharves are building. These will connect with the city-owned belt line.

QUESTIONS ON THE TEXT

1. Who is to blame that the cities are so badly cut up with numerous railroad properties? 2. How does this hinder communication between different sections of a city? 3. Does it affect the way a city might grow? 4. What advantage would it be to have all factories massed in one section of the city? 5. How is it possible to prevent bringing in and out of a city the freight cars that are destined for foreign points? 6. Where should the warehouse center be located, within or without the city limits? 7. What advantage comes from a belt line about the city, like the one at New Orleans? 8. Why is it better for the city to own such a belt line? 9. Why should the city docks be available to all railroads? 10. Name two large American cities that own their docks.

QUESTIONS ON YOUR HOME CITY

11. How many railroads enter your city? 12. Does each one have its own right of way or do several roads run parallel on one common right of way? 13. Do the railroad properties close up many of your streets? 14. Do the railroads carry their freight destined to foreign parts through your city?

CHAPTER XIII

CITY PASSENGER TRANSPORTATION

The Transportation Problem.—One of the greatest city problems of to-day is that of transportation. Men must get to and from business quickly and cheaply, and



Courtesy of Baltimore & Ohio Railroad.

Baltimore & Ohio Passenger Car in 1830.

they will live as far out in the suburbs as speedy transit and cheap fare will allow. People whose working hours are long cannot afford to spend too much time on the way; and those whose wages are low cannot afford the

expense of carfare. It is these two factors of transit and fare that force thousands of people to be huddled together in tenements near their places of work.

Solving the Problem. — Steam Roads. — In greater cities the steam roads have a large share of transporting the workers and business men back and forth from the business district to their suburban homes. Steam trains usually make better time than surface, elevated, or subway car lines; but, as a rule, the fare is higher. However, a large number of well-to-do people are willing to pay the extra fare, provided that they can be served by fast trains. So steam roads that cater to suburban passengers have used every possible means to reduce their schedule time.

In running fast trains through the city many accidents occur, and not a few lives are lost at the crossings, which means thousands of dollars collected as damages from the railroads by the injured parties. In one year (1899), in the ten largest cities of the United States, there were 800 deaths from railroad accidents. Partly to reduce damages and largely to comply with the demands of the city councils, the roads attempted to lessen the danger by employing a flagman or gateman at every crossing. In spite of this precaution accidents still happen. Moreover, it is a great expense to the railroad company to employ so many men at crossings.

To overcome the necessity for gatemen, to lessen the number of accidents, and to permit faster suburban service, the railroad men saw that they must either elevate their rails so that the streets would pass beneath the tracks or else lower their roadbeds into subways so that the street crossings would be overhead. Roads that could afford the expense have solved the problem in most cases by elevating their tracks upon embankments.

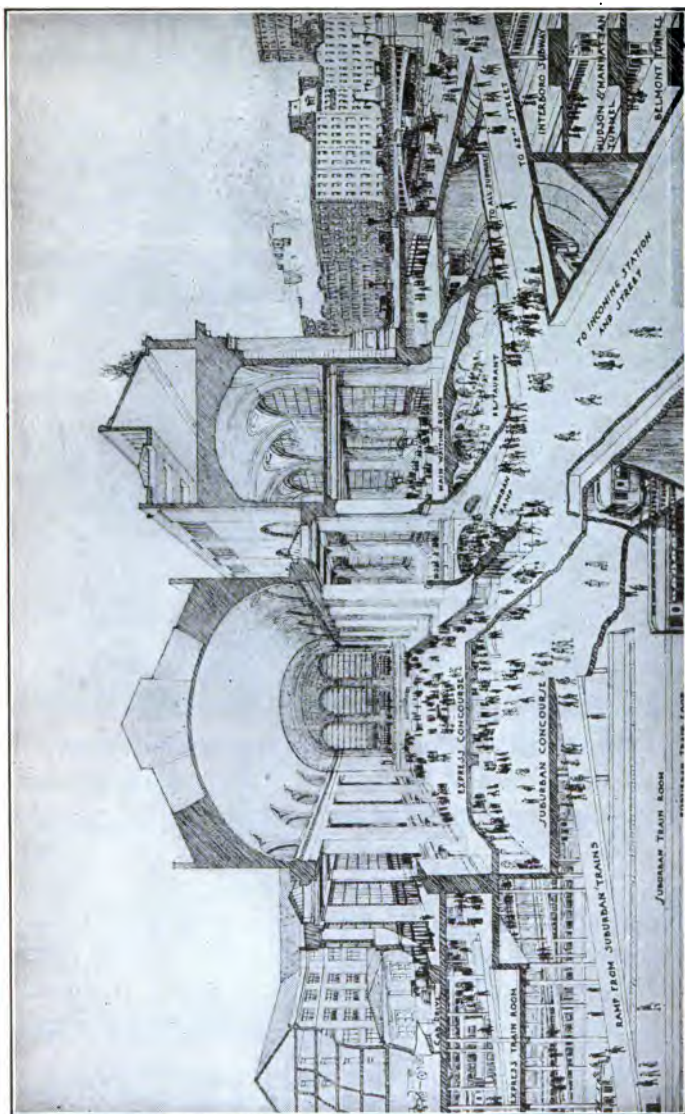
To elevate tracks and eliminate grade crossings is a very costly improvement. It has cost the railroads millions of dollars; but as there seemed no other solution of the difficulty, they have gone about the task vigorously, and in the last twenty years thousands of miles of track within city limits have been elevated.

The Illinois Central began this movement in Chicago in



Doing away with Dangerous Crossings in a Pleasing Manner, Chicago.

1892, raising 28 miles of track and eliminating 13 grade crossings, at a cost of two million dollars. In the same city the Lake Shore followed a few years later by elevating 60 miles of track and doing away with 43 grade crossings, at a cost of three million dollars. In six years the railroads had spent in Chicago, alone, nearly twenty million dollars. And so the movement has progressed marvelously, not only in Chicago, but in Philadelphia and hundreds of other cities throughout the country. The chief roads of New York City have built a huge subway for



Sectional View, Grand Central Terminal, New York, showing Track and Floor Levels and Subway Tunnels.
Courtesy of New York Central Railroad.

their tracks, and above them is now a beautiful broad avenue which is becoming a great civic center and along which are fine hotels and other buildings.

Aside from the immense saving of human life, which is the chief concern, each community has received great benefit in the shortening of the schedule time of their trains. This has induced many people to make their homes in the suburbs, so the railroads have gained by the increased traffic and have learned that track elevation or track depression is, after all, real economy.

Street Cars.—Since the steam roads cannot accommodate all the suburbs, and since many people desire quick carriage for short distances, other means of rapid transit have been employed. Street cars of various kinds have been invented and put to use. The early street cars were drawn by horse power, but this was slow and unsatisfactory, especially in cities with steep grades. San Francisco wished to build a car line on a street where the grade was too steep for horse power, so a cable car line which proved very satisfactory was built.

Cable cars are drawn by an underground cable or rope. Along between the rails underground is a conduit, or small tunnel, in which runs an endless wire-rope cable guided by pulleys. Along the top of the conduit is a slot that permits an iron grip extending down from the bottom of the car to enter the conduit. This grip is provided with jaws to grasp the moving wire rope. The grip is operated from the platform of the car by grasping or unloosing its hold upon the moving cable. The cable at certain points is wound around a huge drum, which is rotated by powerful engines; and this keeps the cable always moving.

For a time it was believed that cable cars could only operate on straight car lines with steep grades, but it was

not long till Chicago introduced them on level lines with sharp and difficult curves, and they were operated in all kinds of weather. The use of cable cars spread rapidly, and soon a score of American cities were using them. In 1891 there were 70 cable car lines in our cities, with nearly 700 miles of track. But some time before this the electric



Courtesy of New York Central Railroad.

A Suburban Electric Train.

traction car had been perfected, and when that came into use the mileage of cable diminished at once.

The greater advantages in using electricity for traction power was soon appreciated in American cities. In New York, Boston, Chicago, and hundreds of smaller cities, the electric trolley system quickly supplanted cable cars and doubled the speed of the cars. Faster schedules sent thousands of people to the suburbs, since now they could get to the heart of the city quickly and cheaply.

As the cities grew, the traffic on certain streets in the

downtown districts of New York, Chicago, and Boston became so heavy that surface cars could not make good speed on account of the crush of teams and vehicles moving in both directions. Men saw that as the cities continued to grow, this congestion of traffic would become even greater, and that there must be some better location of car tracks.

Elevated Car Lines. — New York soon built an elevated car line. On this elevated line steam locomotives were first used, and the fast trains gave splendid service. The elevated line, however, has its drawbacks. The noise is unpleasant and wearing on the nerves of the passengers and those living near the elevation. Moreover, the elevated structure destroys the beauty of streets and shuts out much sunlight. Notwithstanding such objections, our larger cities have developed extensive elevated lines which now use electricity for traction power.

Subways. — But elevated and surface cars and steam roads have not been able to keep pace with the increasing need for passenger transportation. New York, therefore, following the example of London, built a great four-track underground, or subway, system on which run local and fast express trains. The speed is faster and the service better than that of either surface or elevated lines. Boston has also constructed a subway for the business district and Chicago, which already has a subway for freight transportation under the business district, is now planning an extensive subway for passenger service.

The Graft Evil. — The reason why street car companies in some cities cannot reduce fares is because the company has "watered the stock." By this is meant that a company, for example, builds and equips a car line at a cost of say \$100,000. Instead of issuing exactly this amount



Courtesy of New York Central Railroad.

Main Waiting Room, New York Central Terminal, New York.



Courtesy of Pennsylvania Railroad.

Pennsylvania Station, New York.

of stock, which is the honest procedure, the company doubles the amount by issuing \$200,000 in stock and sells it to the stockholders, many of whom do not know that it is half "water." The men who organized the company pocket the difference between the cost of the road and the amount of stock sold. It would be an easy matter to pay a good interest on the hundred thousand dollars honestly invested in the road and still give the people cheap fares. But the company insists that the fares must be kept high enough to pay dividends on the entire two hundred thousand dollars, consequently the fares are double what they by right should be.

The Remedy. — The American people are coming to realize that "watering the stock" of railroad and street car and other public service companies is an injustice to the public, and the time is not far distant when it will be unlawful to sell more stock than represents the actual investment in the property. When the "water is all squeezed out" of our transportation companies, the fares will be reduced, and this will enable more people to move towards the suburbs where there is less crowding, more health, and greater happiness.

City-owned Car Lines. — The city of San Francisco now owns and operates a part of its street car lines. Chicago has a plan whereby a part of the net profits of the privately owned car lines must be paid to the city, and this money is accumulating in large amounts to be used probably for a future subway. It is likely that American cities will come more and more to own and operate their car lines.

QUESTIONS ON THE TEXT

1. What two elements cause people to crowd together in tenements?
2. Compare steam roads with electric car lines for speed.
3. Where do the largest number of deaths from train accidents occur?
4. How is the danger overcome in many cities?
5. Why was there need of elevating tracks?
6. What results followed?
7. How did cable car lines originate?
8. How do cable cars run?
9. Why did they decline?
10. In what way is the electric line superior to the cable?
11. What are subways and what are their merits?
12. What is meant by "watering stock"?
13. What American cities own and operate street car lines?

QUESTIONS ON YOUR HOME CITY

14. Have the steam roads of your city elevated their tracks?
15. Does your city have elevated electric roads?
16. Why or why not?
17. Has your city a subway?
18. Do any of the car lines belong to the city?
19. Do you know of any city where the fares are cheaper than in your city?
20. Are enough cars always furnished to allow each passenger a seat? Why or why not?

CHAPTER XIV

PUBLIC HIGHWAYS

Free Highways. — One of the first needs of any community is good roads and streets, so that people may move about freely to and from business. Some of the best highways in our country have been roads and bridges built by private parties for the use of the public, but a toll, or fee, is charged every time anyone uses these roads or bridges. People naturally dislike this charge for using roads and the inconvenience of having to pay each time, so to-day most communities have free public roads.

Every property owner along whose premises a road or street passes must give to the public a strip wide enough for the needs of the highway. Thus the entire community owns in common the roads and the streets. The village or city usually owns the streets from sidewalk to sidewalk, including the parkways on both sides of the street. Country roads in the same manner belong to the county.

Improving Roads and Streets. — It is not enough merely to have a strip of land for a road ; it must be drained, graded, and made into a good highway. In the country, roads are made usable in one of two ways. The voters and land owners either pay a road tax which is used to improve the road, or each voter and property owner works on the road so many days each year to pay his tax. But city streets cannot be paved and kept up in this way. An expert road builder must do the work of paving, if it is to be well done. Street paving is a costly improvement, but after

it is done the property along the paved street is more valuable.

The cost of paving a street is sometimes paid by bonding the entire city. In this case each taxpayer bears his portion, but the more common method is to apportion the cost to the owners of the abutting property, each man paying according to the width of his lot. The property owner is not required to pay this all at one time, though he may



Courtesy of Warner-Quinlan Asphalt Co.

Laying Asphalt Paving.

do so if he chooses. The assessment, as it is called, is spread over a number of years, and each year a part of this cost, together with the interest, must be paid. If a property owner refuses to pay his assessments his property may be sold and enough of the proceeds used for this purpose. The balance is returned to the original owner. The same method is used to build sewers in the streets. Do you think it is just that men who do not have a team or a

motor car should be required to pay for the paving of their frontage?

Methods of Paving. — Streets need to be paved according to the use that is to be made of them. Where teaming and traffic is heavy, the best wear-resisting material, such as granite blocks, is used. Such streets are noisy. Bricks, which make the next best wearing pavements, are also noisy. Boulevards and residence streets where there is little or no heavy traffic should have a smoother, quieter pavement, like asphalt or macadam. Asphalt is the most popular material for paving streets in residential sections.

A good method of constructing a granite block street is as follows: Excavate the bed of the street to a depth of fifteen or sixteen inches. Level the street bed and roll it with a heavy steam roller. Mix a medium stiff concrete and fill in to a depth of six to eight inches. After this has formed a perfect union throughout the street bed, fill in with fine sand to a depth of one to two inches. This forms a cushion for the granite blocks to rest upon.

The blocks are now laid separately in just the position each belongs. When the blocks are so placed, a portion of the sand from beneath slips in between the blocks and keeps them slightly apart. At intervals of about fifty feet a little wider space is left between the blocks to serve as an expansion joint. This expansion joint is filled with either melted tar or cement grout. The purpose of both is to serve as a binder to hold the blocks together in one mass. Tar is the easier to use correctly, as great care must be exercised to have the grout of uniform consistency. No matter which binder is used, the expansion joints are filled with tar in order to take up the swelling of the street during a spell of warm weather. Expansion joints are also usually laid along the gutter.

The construction for brick streets is practically the same. In both granite and brick streets the length of the blocks runs across the street and not with the street. In streets where car tracks are located, the blocks or bricks are laid with the rail for a distance of eighteen inches on either side.

With sheet asphalt a concrete base is laid in the same manner as for brick streets. On this is spread several inches of stone, crushed to half the size of an egg. The stone is cooked in tar long enough for the tar to thoroughly permeate every pore and crack of the stone. This layer is then rolled with the steam roller. Then a layer of coarse asphalt is put on and thoroughly rolled. On top of this comes the last layer, asphalt of finer grain. This is rolled over and over again until the surface is as smooth as a cement sidewalk. The street is then covered with sand and closed to traffic for a day or two.

The streets of many cities have steep grades or hills where a smooth pavement is not satisfactory because horses' feet cannot get a firm hold, especially in icy weather. A rough cobblestone or granite block is needed to furnish a foothold for teams. The road surface on steep grades also needs to be such that it will not readily wash away during heavy storms.

Giving away Street Rights.—We understand, then, that the streets of a city belong to the public or the entire community, and that no one citizen has more right to their use than another. However, the city government may give away certain rights to use the streets to what are called public service corporations, that is, to street railway companies for laying tracks and running cars, to gas companies who wish to lay gas pipes under them, and to telephone and electric light companies who wish to put their poles

in the parkway. In some cities the waterworks with their piping in the streets belong to private companies.

Street Car Franchises. — In most cities where large numbers of people wish to ride on street cars every day, the street car business is very valuable, and there is a keen desire among men of wealth to get the right to operate the car system. Other public service companies also desire to use the city's highways. The right to use the streets has usually been granted by the city council to corporations in the form of a franchise or written law or ordinance. This states how long the company may use the streets, what charges they may impose upon their patrons, and other conditions. These franchises are contracts between the city and the company, and a contract of this sort is very binding. If the city gets the worst of the bargain, the people must bear the consequences till the term of years expires.

So valuable are these rights that very often in the past unfair means have been used to secure votes in the city council to gain an ordinance agreeable to the public service companies. It is a disgrace that men who have been elected to the council to look after the welfare of the people and the city as a whole, will grant away the public rights for a long term of years as a personal favor or for a bribe. For this reason we must see to it that honorable men be chosen for office in the council.

To prevent the people's interests in the streets being granted away without a fair return in service to the public, many cities now require that all franchise ordinances must be submitted to the citizens at an election before they become a law. In the past, long-term franchises were common, some running for ninety-nine years, or even forever; but now the custom is to give franchises for from fifteen to twenty-five years, so the people at no distant

date will have a chance under changing conditions to make a new and perhaps a fairer contract with the company.

The larger the city, the more valuable are the street franchises, and the custom now holds in many places of regulating the price of carfares, of gas and telephone rates by ordinance and by short-term franchises, so that the rate may change as the city grows. This prevents the companies from oppressing the people. In some cities the franchise requires the company to turn over to the city a certain per cent of their profits. In other words, since the company's gains come from using the people's streets the company must divide profits with the people.

Car companies often fail to give good service. They sometimes use rickety, worn-out cars; they allow tracks to get out of repair; they refuse to put on enough cars so that all passengers may have seats. They overcrowd cars, forcing many people who are already weary from a day's labor, to stand up and hang to a strap for a ride of several miles. It costs more money to run two cars than to run one, and every dollar saved helps to line the pockets of the stockholders in the company. Many cities, especially in Europe, own and operate their own car systems, giving the people cheaper fares and serving the public more satisfactorily.

Gas Piping, etc., in Public Streets. — Houses and buildings in the city need gas for lighting, heat, and sometimes for power; so there must be a system of gas pipes underground. The most convenient place to lay such pipes is through the streets, because in that case the gas company needs only the permission of the village council; whereas if the pipes were put on private property, there would be many people to consult and many objections made.

There are two objections to gas mains in the streets.

The hard, well-paved streets must be torn up every time repairs are needed or leaks discovered, and it is impossible to repair the paving as smoothly and solidly as it was before. For this reason our streets are uneven in places because of bumps and depressions caused by tearing up the pavements. Moreover, traffic is hindered by digging in the streets, and this means much inconvenience to the public. The trouble might be avoided to some extent by laying gas pipes in the parkways, but repairs there would destroy grass, shrubs, and trees. (See p. 56.)

The second objection to gas pipes in the streets is that the pipes often leak slightly in many places, and such leaks may go undiscovered for years. The gas spreads through the soil and gradually kills the fine shade trees and shrubs that line the streets in every beautiful city. It requires fifty years and more to grow our noblest trees, and they are quickly destroyed by escaping gas.

Telephone and Electric Light Wiring. — The telephone and light companies need poles to support their wires, and again the streets are found to be the only convenient place for them. So nearly every city and town has hundreds of ungainly poles in the parkway of every street. If there happens to be more than one telephone or lighting company, it only multiplies the number of poles. The wires must in places run through the trees, and the company's workmen are frequently allowed to cut the branches of beautiful trees until they are ruined. It is possible to run telephone and lighting wires underground either in pipes or in tunnels. Tunnels for this use are very costly, but pipes through which the wires pass are used in many cities. (See p. 56.)

In the greater cities there is a large tunnel under each street. Through this tunnel may run the water, gas, and

sewage pipes, besides cables containing wires for the telephone and lighting companies. This does away with the unsightly poles and dangerous wires, and enables all pipes to be inspected and kept in repair without tearing up the streets, for the tunnels may be made large enough for workmen to pass through them. The service companies in large cities should be required to help build tunnels which would accommodate all these public conveniences, instead of having in different places under every street half a dozen pipes which have to be torn up separately for repairs.

Public Ownership of Public Service Plants. — It costs a great deal of money for a city to buy or build their street railways, to construct telephone or gas plants; and few of our cities have the money to do this. But the time seems to be coming when more of these public concerns that use the people's streets will belong entirely to the people. Some citizens are opposed to public ownership, because they dislike to see everything fall into the hands of unprincipled politicians, but when the time comes we shall place only expert men in control of our city governments. This will be the only plan. In many countries in Europe the cities own and operate all these public service plants, and where this is done money is saved for the people.

Street Advertising. — In many American cities merchants are permitted to extend signs out over the public sidewalks in order to attract more attention. No attempt is made to have these advertising signs beautiful and artistic. On the contrary, they are often gaudy and high-colored. These unlovely placards are flashed in the faces of the passers-by at every turn. Large American cities have forbidden the extension of signs over the sidewalks, and all towns should follow their example. Perhaps the time will come when we shall forbid unsightly advertising on vacant

lots where signs offend the taste and feelings of every one passing.

Civic Lessons from German Cities. — Certain German cities have taught us noble lessons in civic beauty in the matter of signs and billboards. They are proud of their cities, and will permit nothing to mar the beauty of their streets. No citizen may put up a business sign until his plans have been approved by the city official. On street corners are towers for the display of advertising. Each tower is about four feet through and fifteen feet high. The tower is covered with printed announcements, advertising what is going on in the concert halls and theaters. It gives a plan of the city, the location of the nearest police station, post office, hospital, and like information valuable to strangers. On this tower is also some advertising in frames, but nothing repulsive or unpleasing is tolerated. No bills are allowed to be posted on walls, and all who wish to advertise by means of billboards or posters must either use these towers or have men to distribute handbills. This lesson in banishing uncouth billboards is badly needed in our American cities.

QUESTIONS ON THE TEXT

1. Why do people want free public highways instead of toll roads?
2. Who owns the streets?
3. Does the parkway belong to the adjoining property owners or to the city?
4. Who keeps the parkways clean?
5. How is paving paid for?
6. What is the difference between the bonding plan and the assessment plan?
7. Name several kinds of paving material.
8. What are the merits of each?
9. Describe a good method of laying granite blocks and bricks.
10. How are asphalt streets laid?
11. What are the difficulties in paving steep hills?
12. How does the street car company get permission to use the streets?
13. What dishonesty has been practiced in the past to secure franchise?
14. How and why does the city have a voice in the charge made by public service companies?

QUESTIONS ON YOUR HOME CITY

15. How are the streets in your business section paved? 16. Your residence streets? 17. Which pavements do you like best and why? 18. Is the bonding plan or the assessment used to pay for paving in your city? 19. Where do the gas pipes of your city run? 20. Have you ever known a leaky gas pipe to kill a tree? 21. Does your city own its own car lines? 22. Its gas plant? 23. Its electric light plant? 24. Its water plant? 25. Are your streets and parkways crowded with poles? 26. How have some cities banished poles? 27. What do you think of the billboards and street advertising in your city? 28. If an attempt was made to introduce the German plan of advertising, what classes of people would probably oppose it?

CHAPTER XV

TREES FOR STREETS

The Trees Destroyed. — When America was first settled, the country was largely covered with unbroken forests. Such was the task of clearing away the trees to make places for homes and farm lands that men came to regard the trees as enemies to be destroyed rather than as friends to be protected. The forest-covered country was so vast that no one dreamed that there would ever come a time when we should find ourselves in need of trees. Where cities were to be built the forests were all cleared away, there being no attempt or no thought of preserving parks and playgrounds with stately shade trees.

A Recent Awakening. — But now that our cities have grown so marvelously in population and in wealth, the people have come to wish for beautiful places in which to live, comfortable homes with attractive surroundings, and fine streets and shaded parks. They are awaking to the fact that nothing adds more to the health and attractiveness of cities and towns than beautiful trees.

Value of Trees to the City. — On every city street should be planted rows of trees of the same variety. Trees have a restful effect; they furnish shade above the hot pavements; and because of their grace and beauty, they are a source of pleasure at all seasons of the year. In winter we enjoy the outlines of their branches; in the spring, the bursting of their buds and foliage; in summer, the delightful shade; and in autumn, the brilliant coloring.

Not only are trees beautiful and interesting, but they are important from the standpoint of health for the city dwellers. Trees help to purify the air by absorbing the carbonic acid gas that is breathed off by man and that is poisonous to him; and in exchange for this gas the trees give back oxygen, which men need. Trees also help to modify the temperature of the streets, making life more comfortable for the residents:

The usual heat of summer is made more intense by the



Courtesy of City Forester, Cleveland.

- Street made Beautiful with Maples, Cleveland.

reflection from pavements and buildings. Heat is reflected just as light is from a mirror or other smooth surface. The foliage of the trees cuts off much of the direct heat of the sun, and also some of the reflected heat from the pavements. Trees also lower temperature by giving off through their leaves moisture on hot days when relief is especially needed. As the moisture is evaporated from the surface of the leaves it takes up heat from the air, leaving it cooler and less oppressive. The Commissioner

of Health of New York in 1872 declared that the high death rate among children during the hot weather was caused by excessive heat, and the Health Department recommended the planting of shade trees on all streets and avenues to reduce the heat.

Trees also, on account of their beauty, add to the value of property. They are among the first things that impress a stranger in a new city. But more important than this is the fact that the combined influence of many fine trees makes every one happier and better.

No city in America possesses such avenues of fine shade trees as our capital city of Washington. Visitors to this city admire the magnificent public buildings, but they all agree that the beautiful avenues of shade trees which make the city one glorious park are its chief attraction. In Paris, too, we find trees almost innumerable, and these comprise a large part of the splendor of the French capital.

Qualities of a Good Street Tree. — Good judgment must be used in the selection of trees for street planting. There are many things to consider. Street trees are usually unprotected from heavy storms and must have sufficient strength to resist wind, sleet, and snow. There should be knowledge of how the tree appears when it is full grown. A symmetrical outline is important, the leaves should remain in a healthy condition throughout the summer, and those that show color in the autumn are desirable. The falling of leaves, twigs, bark, and flowers or fruit keeps the sidewalk in an untidy condition, while slippery fruit is both untidy and dangerous. There are only a few trees that are entirely free from insect pests, yet some trees are so much less affected than others that they are to be preferred.

Trees should not have a foliage that is too dense, else

the sunlight cannot penetrate to the ground so the grass can grow under them. On the other hand, if the tree has an open scraggly head, it does not afford adequate shade during hot weather. The ideal street tree is of medium size and of a long-lived variety. Quick-growing trees have wood that is soft and easily broken, so they are short lived. Money and time spent in planting such trees is wasted.

There are not many kinds of trees that are suitable for street planting in any locality. It is not easy to find trees that are sufficiently hard to withstand city conditions, long lived, easy to transplant, straight and symmetrical in growth, immune from insect attack, and free from the litter of flowers and fruit. The street trees in Washington have been under municipal control since 1872. Thirty or more varieties have been tested, and only ten or twelve have been found satisfactory. Paris has tested a hundred varieties, and found only eleven that bore the conditions well.

City Control and Care. — About the only way to have the best trees chosen for a long street and to secure the proper distance between them, is for the city to take entire charge of the tree planting and assume the care of trees in the parkways. If it is left to the property owners, some prefer one kind and some another variety, and every householder will crowd the trees on his lot. If the planting is left to real estate men, they will choose the quick-growing varieties regardless of how the trees will appear when mature, for their purpose is to make an early showing in order to dispose of their property in the shortest time.

It requires special training to care for trees properly, and the best results are obtained when a tree expert is employed to take charge of the city trees. The larger American cities now have their city foresters, who superintend the planting and pruning of trees. They also protect



Fighting Tree Insects along City Streets.

them from insect enemies as well as from the careless employees of telephone and lighting companies who string their wires along the parkways.

One of the citizens of Harrisburg was one day going along a street when he saw a man cutting off the branches of a large tree in front of his property, leaving nothing but the big trunk. Upon being asked why he was spoiling the tree, the man replied: "I can make use of the wood, and don't care for the shade." As there were no city ordinances in regard to shade trees, the man was allowed to go on with his work while his neighbors protested in vain, and the tree was left mutilated and unsightly, an eyesore to the residents of the whole street.

There is no greater mistake than planting trees too close together. They should always be far enough apart to permit each to develop perfectly. Forty feet is the aver-

age distance, and some, like the elm and sugar maple, should be forty-five feet or more apart. Trees should be set eight feet from lamp posts and ten feet from water hydrants. Only one species should be allowed on a street.

Popular Shade Trees. — The Carolina poplar, or cottonwood, is a poor tree. It will, if untouched, grow too large; the wood is weak and extremely brittle, and storms often break so many limbs as to disfigure the tree. It sends out close to the surface roots which may in time crack concrete walks, while the smaller roots are likely to enter sewer pipes and clog them. The Carolina poplar has so many bad habits and so few good points that many towns have forbidden the planting of them.

Of all the trees planted in the city of Washington, the oaks make the finest appearance. There are in the city about five miles of streets planted with pin oaks. They are shaped like a pyramid with slender branches stretching out horizontally. The leaves of the pin oak turn a deep scarlet in autumn and fall late in the season.

Another beautiful street in Washington is lined with the red oak, which is one of the most desirable street trees. There is no American tree more prized in Europe, and it has been cultivated there for two centuries. It grows faster than any other native oak, forming a round-shaped head, and its leaves have a richness of color possessed by few other trees.

Fine as are the pin oak and the red oak, the scarlet oak is coming to be looked upon as superior to both. It is very hardy and grows rapidly, too. The scarlet oak has the most gorgeous autumn coloring. The white oak is a noble tree, but it is not so desirable as the other varieties for street use.

As a shade tree the American linden, also known as bass-

wood, has many good points. It is a vigorous grower and forms a dense shade. However, it has so many insect enemies that it is not often chosen to meet city conditions.

The white or American elm stands alone for its special kind of beauty. No other tree combines such strength with so many graceful curves. It is beautiful at all seasons of the year. In spite of its many insect enemies it will always be popular.

The Norway maple appears to be the best maple for street use. It resists insects well. It does not grow so large as the native hard maple. The trees should be set about thirty-eight feet apart. The Norway maple bursts into profuse bloom in the latter part of April or early May. It is very hard and easily transplanted. It is always attractive, putting forth leaves earlier in the spring and retaining its foliage later in the fall than our native maple.

The sugar maple is hardy, shapely, and an ornament to any street. It may grow to a height of fifty feet or more and should not be set closer than forty feet. Most of the splendor of our autumn foliage is due to the brilliant coloring of the sugar maple. Even during the winter this tree is attractive because of its symmetry. While it is so beautiful, the sugar maple, because of dust, smoke, and countless insect enemies, does not thrive in cities so well as some other trees.

The red maple makes a good street tree. It is somewhat softer than the Norway or sugar maple, but resists ordinary storms well.

The trees and shrubs of our city streets and parks should all be permanently marked with tags giving their common names as well as their scientific names. This is an opportunity for teaching the public that is often neglected by city authorities.

QUESTIONS ON THE TEXT

1. Why do most Americans have so little appreciation of trees? 2. Why do we have trees in our parkways? 3. What American city is most noted for its street trees? 4. How are trees said to affect health? 5. How do they affect summer temperature? 6. What qualities are desired in a street tree? 7. Which is better to have, city control or private control of tree planting on the streets? 8. Why? 9. What are the duties of a city forester? 10. What can you say of the distances between trees? 11. Name some common street trees and state their good qualities. 12. Why do people plant cottonwoods? 13. Is it wise to leave the decision regarding the kind of trees in new subdivisions to the real estate man? Why?

QUESTIONS ON YOUR HOME CITY

14. Are your parkways lined with trees? 15. Are they of one kind, or has each property owner followed his own taste in planting? 16. What kind of street trees do you like best and why? 17. Has your city a chief forester? 18. Are your trees planted far enough apart so that each may develop symmetrically? 19. Why are people likely to plant trees too close together?

CHAPTER XVI

PUBLIC RECREATION

Education in Play. — American cities have spared no pains in providing for the people means of free education in the public library and in schools of great excellence. There are, however, many other instruments of education that as yet have not been seized upon in any large measure by our city and state governments. Our best educators have come to see that there is great opportunity for education in such recreations as music, the theater, and especially in organized play.

In play boys and girls learn valuable lessons in citizenship that cannot be taught so well in school. They learn to coöperate by each doing his part for the success of the team; they learn self-denial by sacrificing their own desires and glory for that of the team, as in the case where a batter "bunts" the ball to bring in a runner when he would have much preferred to bat the ball to the outfield and show his own skill. Then, too, boys and girls learn the dignity and beauty of honesty and fair play. They learn to get along in harmony, to settle differences, and to control their tempers. These qualities all help to make the best and most patriotic citizens.

It is now quite common to have free public concerts in the parks of many of our cities, and city-owned concert halls with their music of high excellence would be an uplifting, educational force in every community. Concerts were given free during one winter in Boston, but as yet

they have very little place in American cities. Theaters and lecture halls, owned and operated by the city, are found in European cities; especially in Germany, where they are a great influence in the education as well as the recreation of the people. One American city, at least, owns a theater — Marietta, Ohio.

The Playground Movement. — American cities have taken more kindly to outdoor recreation. But it was a



Baseball, Claremont Park, New York.

most difficult task to get the playground movement started. Boston began to establish public playgrounds first in 1872. The movement has grown until the schoolyards of that city are generally used for play during the summer. They are usually equipped with sand piles, swings, and light apparatus. Skilled play directors are in charge. Winter play rooms have been secured; they are open afternoons

and evenings for games, reading, and sewing. This movement has progressed, until Boston has become the leading city in America in the experiment.

Mr. Jacob Riis of New York City proved a great friend of the children. Through his untiring labors, the notorious slums of Mulberry Bend were abolished. A block of wretched tenements was all torn down, and in the midst of this crowded section was created Mulberry Bend Park, costing a million dollars and more, with its three acres of sunlight and fresh air. This achievement required years of effort, but Mr. Riis never gave up the fight in behalf of humanity. After the park was secured for the people, they were not at first allowed to use it. It was put to grass sod and inclosed with a fence. The signs "Keep off the grass" appeared everywhere, and the tenement children were not allowed to play there. Then another friend of child life, Mr. Charles Stover, joined with Mr. Riis in the fight for playgrounds, and at last an open-air gymnasium and playgrounds were fitted up for the children. People began to see that sand piles and swings, as well as lawns and shrubbery, are desirable for the good of the community. New York has now many well-equipped city playgrounds; more, perhaps, than any other city except Boston; and scores of American cities are following in this enterprise.

Chicago has made great strides. There the practice originated of flooding the playgrounds in winter for skating ponds. Philadelphia, after a long struggle, secured its first playground about the same time as New York, and here was early used the public shower bath and running tracks, along with sand bins and the like.

The chief summer sports on the playgrounds are games of ball, or bathing and wading where water is provided. The bathing beaches are open for from seventy to eighty



Clean and Healthful Sport, Chicago.



Boys' Swimming Pool. Small Park, Chicago.

days each summer in Chicago. Cities farther south have longer seasons. The attendance at two bathing beaches in Chicago in 1911 was more than 200,000 people. Every precaution is taken to protect the bathers from danger, and there is seldom a life lost.

The chief winter sports are skating, wrestling, and indoor baseball, where gymnasiums afford the space. During the year 1911, the attendance at the 17 Chicago playgrounds was nearly 3,000,000 children and adults. It is impossible to number all the people who profit from the playgrounds of our cities.

Public Baths. — New York State has a law requiring its larger cities to establish and maintain public baths, each provided with hot and cold water and kept open fourteen hours a day. Not only are public baths a source of recreation, but they serve as a necessary protection to health. Many investigations have shown that a large number of city homes are not provided with bathtubs, and people often neglect bathing because of inconvenience and discomfort.

The first all-the-year public bath which provided swimming tank and showers was built in 1889 in Milwaukee. The Carter Harrison bath of Chicago was built in 1893 and was one of the first to provide shower baths the year round. The expense to Chicago for providing free baths to half a million bathers is between three and four cents apiece. New York was the first to furnish free instruction in swimming. The larger cities are now teaching free the science of swimming to tens and hundreds of thousands of people each year.

City Parks. — Besides the open-air space for playgrounds there is a need for small parks or gardens which provide a resting place where older people may assemble and pass the

time in pleasant surroundings. Such parks, with their trees, shrubs, and flowers, add much to the refining influence of a city and help to make life more enjoyable.



A Handsome Field House. Small Park, Chicago.

The large city parks furnish ample space for golf, baseball, football, tennis, cricket, and other games. Where



In the Larger Parks, Chicago.

water is available, there is, besides swimming and bathing, the opportunity for boating, yachting, and sometimes fishing. Moreover, the city parks often sell ice cream, soft

drinks, and lunches to the people at a more reasonable price than is found elsewhere.

Parks are frequently equipped with splendid field houses and gymnasiums with assembly halls for neighborhood entertainments. There are club rooms, reading rooms, branch libraries, and other means of education and recreation such as art galleries and museums. These field houses, museums, and gymnasiums would serve the people better and for a greater portion of the year if they were built in connection with the public schools. Eventually this will be done.

The School as a Center. — The ideal playground will also be established in connection with schools or close to them, and the time will come when the school will be a true neighborhood center where all the activities of education, of recreation, and play will be under one control. In New York every school at the present must be provided with a playground. In congested districts the playground is sometimes located on the flat roof of the building, but in the outlying suburbs, spacious grounds are provided. When the union of school and playgrounds comes, the movement of organized play will spread rapidly to smaller cities and towns; and even rural schools, it is hoped, will have their playgrounds in the hands of skilled play directors.

QUESTIONS ON THE TEXT

1. How does play help to develop character? 2. What might be the advantage of a public-owned theater? 3. What American cities took the lead in outdoor recreation? 4. Who was Jacob Riis and for what is he noted? 5. Discuss winter use of parks and playgrounds. 6. Why are public baths necessary? 7. In what way are a number of small parks of more value than one big one? 8. What is the use of field houses in the parks? 9. Are those in large parks much used in winter? 10. What advantage would parks have as to use if they

were made a part of the public school grounds? 11. What is the chief purpose of a park, to be beautiful or to be useful to the people as recreation grounds?

QUESTIONS ON YOUR HOME CITY

12. How many parks are there in your city? 13. Are they conveniently located? 14. Can you suggest a better location? 15. Do you believe in the sign "Keep off the grass" in parks? 16. Why, or why not? 17. Has your city playgrounds? 18. Are they used as much as if they were part of the public school grounds? 19. Some cities are combining park boards with school boards. What reasons may be given for and against this idea?

CHAPTER XVII

SCHOOLS

Reason for Free Schools. — In a country like ours, where the people rule themselves, there is a great need of education for all citizens, or the majority of voters through ignorance may destroy the republic. It is to protect our country from the consequences of the votes of ignorant or uneducated citizens that we have established free public schools. Any country that gives people a share in the government, must see to it that those people are raised above ignorance.

Compulsory School Attendance. — It is now easy to understand why every state has truancy laws and why every child is required to go to school till he is fourteen years old. Some of our wisest people wish to raise the age limit to sixteen years, for they claim that no child should be permitted to stop his education at fourteen; first, because he is worth so little in the business world at that age, and second, because two extra years would mean a great deal to his education, making him a better and more intelligent citizen.

When boys and girls must go to work at an early age, there ought to be free evening schools where they might continue their study. In Germany and other European countries, the cities have such continuation schools; and here regular attendance is required as firmly as in day sessions. These German schools are justly famous. As a

rule the free night schools of our country have accomplished very little, because in most cities regular attendance is not enforced by law. No pupil can hope to accomplish anything of importance unless he is regular and prompt at school. If he attends one recitation and misses the next, he might as well quit his classes entirely. Nevertheless, there is a growing movement in favor of continuation schools in many American cities.

School Taxes. — There are thousands of families that pay no direct tax, and yet the public school freely offers, even forces, schooling upon their children for the future good of the government. It may seem unjust at first thought to tax the well-to-do classes heavily for purposes of education when they may have no children of their own to educate, and to use this tax collected from the rich to educate the children of the poor of the community. This is, however, the only way to provide funds for our schools, because the poor man can seldom pay a sufficient amount for the education of his children. Since the wealthy are profiting most under the protection of our government, they should be willing to pay a large part of the cost of supporting it.

Many citizens object to the amount of school taxes that they are required to pay, and sometimes they hide as much of their property as possible from the assessor. This conduct is most unpatriotic. It is easy to see that if every one acted thus, we could not have public schools at all; and our beloved country would soon decline because of the ignorance of the mass of people.

Equipment and Running Expenses. — The first need of a school is a building, well-lighted, ventilated, and heated. The cost of a modern building is considerable, and many communities have for this reason been content with ill-



Fine High School Plant, Oak Park, Illinois.



New Trier Township High School, Winnetka, Illinois.

suited and unsanitary school structures. The money necessary to construct a school building must be raised by taxation, but in order to prevent paying it all in one year, most cities sell bonds against the district to get the ready money for erecting the school plant. These bonds have a face value of one hundred or one thousand dollars printed on them. They bear interest and run for a term of years. The terms of the different bonds are usually so arranged that certain ones become payable each year. The interest must be paid annually, and when the term of the bond expires, its face value must also be paid. In this way the large cost of building a school is spread over a number of years, and the tax is not felt so keenly as if it had to be paid all at one time.

Besides the cost of the building, the running expenses, which include supplies, fuel, and teachers' salaries, must be paid. This lays another burden of tax upon the community. The chief item in this expense is for teachers' salaries. Teaching is very skillful work, requiring many virtues and talents, and, as in other professions, the time and expense of preparing for it must be repaid with good salaries. Poor wages force competent teachers to go elsewhere or to leave the teaching work, and poorly trained ones will take their places.

The Teacher. — You can readily see what kind of workers most men and women are by the results of their work. A carpenter's house is proof of his skill to do fine handwork, the doctor's patients recover or die, and the lawyer wins his case or loses it; and equally evident are the results of the work of the farmer, the manufacturer, the tradesman, and of most businesses of our civilization. But the teacher's success is not so easily measured. One who is not practiced in judging successful teaching is likely to pronounce a poor

school a good one. Since the teacher is working upon the minds and characters of her children, her work is of the highest type. A good teacher's work cannot be measured in money, while a poor teacher may be doing more harm than good. For this reason only superior men and women should be retained in the classroom.

Some school boards think they are serving their communities well and saving the people's money by keeping teachers' salaries down, whereas they may be driving away men and women whose work is priceless and in their places taking poor, and even harmful workers. In this way children suffer in training and education through no fault of theirs, and this lost time can never be made up to them, because they are quickly pushed on to take their places among the world's workers.

The Superintendent. — The best way to secure good teachers is to employ an expert superintendent who is a judge of teaching. To him should be left the choice of new teachers and the reëmployment of the old ones. The superintendent should be shielded from politicians who may wish to secure places in the schools for their friends. Many a school man is greatly worried by the urging upon him of undeserving teachers when he is trying to protect the interests of the children who are intrusted to his care. Frequently when the town politicians cannot force in their unworthy friends, they elect to the school board members who are pledged to dismiss the superintendent. For this reason a man who has proven his competence and value in such a position should be elected for a long term of years. Some communities that have excellent schools, have a rule that no teacher living in the town shall be employed in the school, thus removing any reason, except merit, for a teacher's selection by the school official.

School Board Members. — Cities wishing first-class schools should elect to the school board only their best citizens — men who have in holding the position no selfish motives — friends to push, etc.; men who consider only the good of the children, the future citizens of the village. There is no more patriotic and important office in any city than that of member of the school board. It means more to the future of the town and country than that of councilman; and yet many communities fail to insist upon their ablest citizens filling this office. School board members are not paid for their services, but high-minded business men are usually ready to serve their community without pay.

School Hygiene. — Lighting. — The two most important features of a school building are its lighting and ventilation. Nearly every building is well heated, but as people cannot immediately see the evils of poor lighting and ventilating, these features are too often neglected. It is impossible to provide an even, well-distributed light from side windows, because most of the light rays move straight to the floor near the windows, making the desks near by too glaring and leaving the opposite side of the room without sufficient light.

Poor lighting can be greatly improved by using in the windows, instead of clear glass, a kind called sheet prism glass that scatters the light and throws part of it to the dark side of the room. Prism glass is more expensive, but there is nothing so valuable as the eyes of the children. If school boards cannot afford prism glass, the next best kind to scatter light as it passes through the windows is ribbed glass. This helps greatly in making the room evenly lighted.

Children should never be seated so as to face a window.

The eye cannot adjust itself to the strong light from the window and the soft light reflected from the walls at the same time, and thus it is strained. The shades for school windows should be white, for though more easily soiled, they admit more light and distribute it in a far better way.

The only scientific way to light a schoolroom is to follow



The First Top-lighted School, River Forest, Illinois. Light well distributed and eyes shielded.

nature's plan and light it from above. By building schools one story high and using the saw-tooth skylight so the sun cannot shine directly in, rooms may be perfectly lighted from the ceiling. This enables the teacher to keep the shades drawn over the side windows that glare into the pupils' faces with a light so strong that it causes serious eye strain. In the middle west many buildings are now con-

structed with top-light, and so perfect is the result that the movement is spreading. The illustration shows a room in the first top-lighted school.

Ventilation. — Intelligent farmers are learning the importance of ventilating their cow barns, horse stables, pig pens, and poultry houses, but in many places their children are still housed in ill-ventilated schoolrooms. To get



Open-air School for Tubercular Victims, Chicago.

plenty of fresh air in schoolhouses without creating a draft is not an easy task. It is impossible to ventilate by means of open windows in cold weather, without exposing some of the pupils to a cold draft. The fresh air should be heated before it is sent into the room, and the cold air which settles to the floor should be taken out through an air shaft. The most effective way to ventilate a schoolroom is to heat the fresh air in the basement and to force it into

the room by means of a huge fan which is run by a steam or gasoline engine or by a motor. This fresh air is warmed and then forced in above the heads of the children. It then gradually cools and settles to the floor, where it passes out through a cold-air shaft.

It is rather expensive to run a fan to drive the air, and where communities must seek a cheaper way the room may be heated by hot water or by steam radiators placed near the outside walls. Through the wall behind each radiator is an opening to admit fresh cold air from the outside. As it passes through the radiator the air is heated. This brings in warmed all necessary fresh air. Then by means of cold-air shafts or pipes with the openings near the floor the cold air of the room passes out and up through the roof.

School Playgrounds. — Every school needs a large playground for fresh air and exercise. Educators believe that many important lessons may be learned by playing games. Children learn to respect other children's rights; they learn to control their tempers; and they learn to play fair, a lesson in honesty. Play is necessary for every child to develop muscle, brain, and character. In the country a school site of several acres can well be afforded, and the taxpayers and the school board should insist upon large playgrounds. In cities, however, large school grounds are often prohibited by the high cost of land. Now that cities are realizing how vital open-air spaces are to the health and good behavior of the people, many of them are buying park and playground sites at enormous prices. These should be located adjoining the school buildings, so that young people as well as adults may get the most use of them. School boards and park boards should plan to locate these public institutions together.

Community Use of School Buildings. — Inasmuch as school buildings impose a heavy tax upon the community, they should be used by the people in various ways. Many cities are opening schools for evening use — for lectures, political meetings, moving picture entertainments, gymnastic dancing, and the like. Advanced communities are building their schools with an assembly hall on the



Girls' "Gym" Field House, Chicago.

main floor for the use of men's and women's clubs, and with a good gymnasium where the young people may exercise and play games throughout the day and evening. As the school is well heated during the day, it can be made comfortable for evening use at slight expense. Thus the school plant will become more and more a social center. It may house the public library or a branch thereof; it

may afford a meeting place for clubs, socials, lectures, and the play features of the Y.M.C.A. The school building is paid for by the people of the community; therefore, let the people use it in every way they can.

QUESTIONS ON THE TEXT

1. Why do we have free public schools? 2. Why do we have compulsory school attendance? 3. Why should not parents be free to school their children or not as they please? 4. Of what advantage are continuation schools? 5. Is it right to tax everybody for school purposes? 6. Tell all you can about school bonds. 7. Why should good salaries be paid to teachers? 8. Are they as well paid as similar positions in the business world? 9. Why is it difficult to judge a teacher's work? 10. Should parents be grateful to a teacher who sees to it that a child does his work? 11. Why is a good superintendent the right one to select teachers? 12. What can you say of school lighting and ventilation? 13. What is meant by using schools as social centers?

QUESTIONS ON YOUR HOME CITY

14. Do the people of your community complain about school taxes? 15. Find out what your school building cost. 16. In many cities, schools cost \$6,000 per schoolroom. How does this compare with yours? 17. Is your school provided with a fan to drive the air in and out? 18. Have you large playgrounds? 19. To what extent is your building open to the public as a social center?

CHAPTER XVIII

THE PUBLIC LIBRARY

The Demand for Books. — Nearly everybody reads, to-day. We read many books where our grandparents read one. People who do not read books read papers and magazines. A man wants to know whether peanuts may not be grown profitably in a northern state; an engineer wants a remedy for a cylinder that is out of order; a boy desires practical directions to make an aëroplane. When they find that there is literature to be had on these subjects, they read it with great interest. But very few people can afford to buy all the books and periodicals they wish to read, or those that will give them the information they desire. The influence of good reading material is so important that many communities now consider it a part of their system of education, and provide it free.

History of the Library. — It was barely eighty years ago that the idea of a collection of books for the free use of a community became a reality in our country. The oldest library of this sort still in existence is probably at Peterboro, New Hampshire. It was organized in 1833. The Boston Public Library, one of the first to be supported by a public tax, is not yet sixty years old. The greatest growth in the extension of libraries has been since 1876, when the library workers organized under the name of the American Library Association.

Uses of the Library. — The uses of the library are to provide books, to administer them wisely, and to create an

interest in them. The old-time idea of a library was to collect books, the modern one is to get the books used. Collections of pictures, lectures, story-telling, and many other devices are employed to attract people to the library. Since the American public has come to consider the library as part of the educational system, the city not only supplies the best of free reading material for its citizens, but uses all means to teach and encourage them to use books. This is now done in every community where they can afford to vote a library tax.

Aside from its use as an aid to education, many regard the library as a place of recreation where, in comfortably lighted and heated quarters, they may enjoy entertaining books and magazines. The community looks upon the part the library plays in amusing people as it does upon its parks and playgrounds. Clean, healthful entertainment is good for every one and keeps them out of mischief. In large libraries all classes of men may be seen enjoying the daily papers in the reading rooms.

The Library. — *Equipment and Funds.* — The library should be a beautiful building with attractive surroundings. The very best means of ventilating, heating, and lighting should be employed, particularly the best means of lighting. Some of the handsomest library buildings in existence are lighted from the top, the best possible method. The funds for maintenance at the disposal of the public library are the proceeds of taxation; receipts, such as fines; interest on endowment funds; and current gifts. No public activity has received larger gifts from individuals than has the library. The selling of bonds for a varying term of years is used to erect the building. This must be authorized by a vote of the people of the community.

Departments. — In providing books, a well-equipped library will have, first of all, reference books; second, a circulating department; third, special opportunities for children; fourth, periodicals; fifth, special helps for students. Some libraries are for reference alone. Their books are the more expensive sort and are not circulated. The modern circulating library has bookstacks open to the public and, when advisable, branch libraries at convenient stations to reach all parts of the city. Even when branch libraries are not needed, there are special methods of distributing books in the public schools.

The Trustees. — A public library owned by a city or a town is generally managed by a board of trustees, elected or appointed for that purpose. This board employs the librarian and the helpers, cares for the building, and apportions the funds. In smaller libraries most of the business end of the library administration is left to the various committees of the board.

The Librarian. — The head librarian in even a small library must be well educated in a general sense, and should be especially trained for library work. A large library with its number of departments and complex plan of branches requires, in addition to scholarship, considerable business ability on the part of the librarian. The modern librarian does not believe in the library simply as a place to store books, but regards them as so many implements to be made useful. The head librarian, in order to save money, frequently trains his own assistants, giving them instructions in return for their services in book repairing, cataloguing, indexing, and the other details of library work. The chief duty of the librarian and his assistants is to teach people how to use the library, and to see that every one finds there the information he is seeking.

Books. — The cost of a book in continual use is made up of the first cost of the volume and the expense of rebinding and mending it until it is worn out. In the selection of books for a public library the first consideration is the community and its needs. The books should be of such a nature as to tend to improve the taste of the people who borrow them and yet should be within the interest of the readers, so that there will be a demand for them. Men who desire to read for information concerning their daily work, if they do not find this material, are apt to regard the library as a place of amusement for women and children. In smaller libraries, the librarian and a committee from the board choose the books, sometimes giving an opportunity for requests from such patrons as may be interested.

Fines. — The penalty for keeping a book longer than the time allotted is commonly a fine of one or two cents a day. In excuse for the fine system, it is urged that a borrower who keeps a book longer than he should is depriving some other person of the use of it. He should make good to the library, in the only way he can, the injury of interfering with its usefulness. In the New York Public Library, of 6,000,000 circulation, about \$25,000 is collected yearly as fines. Money so obtained is used in various ways. In some cities the library board takes charge of it, in others it is turned into the city treasury.

Children's Libraries. — The first children's library was established in New York City in 1885, it being the plan of a primary school teacher. Now it is one of the most important departments of the library. In twelve years the children's rooms had 150,000 volumes with a yearly circulation of 2,200,000. Librarians are especially trained for children's work, and reading rooms especially fitted for children.



Courtesy of Mount Vernon Public Library.

Children's Room, Mount Vernon (N. Y.) Public Library.

Children's Library League. — Recently the Children's Library League was organized in Cleveland. Before it was a year old it had 14,000 members. The movement has spread in many cities. The object of the league is to care for library books when in circulation. As a reminder of their pledge, various bookmarks have been issued. The first was written by a minister from Wisconsin, but there have been others gotten out since.

“Once on a time a library book was overheard talking to a little boy who had just borrowed it, and these are some of the things that it said:

“‘Please don't handle me with dirty hands. I should feel ashamed to be seen by the next little boy who borrowed me.

“ ‘Or leave me out in the rain. Books can catch cold as well as children.

“ ‘Or make marks on me with pen or pencil, it would spoil my looks.

“ ‘Or lean on me with your elbows when you are reading me. It hurts.

“ ‘Or open me and lay me face down on the table. You wouldn’t like to be treated so.

“ ‘Or put in between my leaves a pencil or anything thicker than a sheet of paper. It would strain my back.

“ ‘When you are through reading me, if you are afraid of losing your place don’t turn down the corners of my leaves, but use a bookmark and close me and lay me on my side to rest.

“ ‘Help me to keep fresh and clean and I will help you to be happy.’ ”

School and Library. — The course of study is laid out in some schools with the intent of teaching the child to use the library after he has finished his school days. Regular use of the library with good advice has made a student of many a man. In school, pupils must be treated in a class, although every child differs from his fellows. But a good library furnishes what best suits each one. More than one youth has been helped in the choice of his life work by going freely from one subject to another in the public library. Librarians find they can work more successfully in connection with the schools than in any other way. In some cities collections of books, selected by the teacher, are sent to each room in the schools, and loaned to the pupils and their parents. The Buffalo Library makes special reading lists for pupils and teachers. In several schools, systematic instruction is given each grade in the use of the library. The lower grades are taught about the make-up of a book,



Courtesy of Mr. Claude G. Leland.

Using a Library in the Elementary Schools.



By permission of the Principal, Dr. W. L. Feller.

Girls' High School Library, Brooklyn.

the title-page, copyright, table of contents, and index, and how to use them. The other grades learn facts about binding and the use of reference books. Still higher grades are taught the use of the card catalogue and other guides in the library.

QUESTIONS ON THE TEXT

1. Where did the library supported by taxes originate? 2. What are the uses of the library? 3. What can you say of the library building? 4. How is the library usually controlled? 5. Why do librarians need to be trained? 6. How do libraries attempt to co-operate with schools? 7. Do you think of any advantages in having the library in the public school buildings? 8. What is the average life of a library book? 9. What are some of the rules for their care and return? 10. Why are fines necessary? 11. What is the reference library? 12. What are branch libraries? 13. What are the "Carnegie libraries"?

QUESTIONS ON YOUR HOME CITY

14. Has your community a public library? 15. Is it well located? 16. Reading rooms should have overhead lighting; has yours? 17. How is your library ventilated? 18. What are the objections to window ventilation? 19. Has your library a children's department? 20. In what ways does the purpose of the library differ from that of the public school?

CHAPTER XIX

FIRE FIGHTING

Fire, Man's Helper. — Fire under control has long been man's great friend and helper. The cave man and tree dweller worshiped fire and prayed for its protection, because they saw its terrible power to destroy. Until early man mastered fire, he lived the life of a savage with little chance to improve. When he learned how to start a fire and control it, he found many uses for it. He employed fire at first to protect himself from wild beasts, then to warm his rocky cave, and at last he learned to cook his food. In time fire was used to smelt ores to make tools and weapons. Later still the steam engine, which to-day does so much of the world's work, was invented.

Danger of Uncontrolled Fire. — All fire's helpfulness to mankind has come about through its use under control. But when fire escapes bounds, it is as terrible a foe to-day as it was in the days of old. Then it destroyed the forests that sheltered the game upon which the savages relied for food, and it often devoured their crops and homes. When man began to gather in villages and to live in huts made of skin or wood, fire was still more destructive, and it frequently swept away the villages and killed many of the inhabitants. One of the means used by the American pioneers to conquer the Indians was to burn their cornfields and fire their villages.

Control of Fire in Former Times. — For many centuries every family was forced to protect itself from fire, but as

the villages grew and the wooden houses were built closer together, entire towns and cities were often swept away in a few hours. Then men learned that it was not safe to let every family look out for itself, but that the people of a community must work together to fight fire. The making and enforcing of laws for the protection of its people is the purpose of government. So governments began to make laws for the prevention of fire.

Under the Romans. — The ancient Romans learned to fight fire well, and yet the city of Rome had many dreadful conflagrations and was nearly destroyed by fire in Nero's time. The Romans had their fire companies, and besides these many wealthy people of that day kept night watchmen in their houses to guard against the dangers of fire. Rome's method of fighting fire in tall buildings was by using hand squirts. These were leather bags with long pipes attached. By pressing or standing on the bag full of water, a stream was thrown to some height through the pipe.

In the Middle Ages. — In the Middle Ages, after the knowledge of the Romans was lost, the people became very ignorant. Schools disappeared and generations grew up who knew nothing of the making of pumps or engines for fighting fires. Cities were built with little attention to fire protection and terrible disasters occurred which wiped out entire cities in a few hours. When these misfortunes occurred at night the loss of life was often appalling.

English Laws and Customs. — Since it is usually at night that fires get a dangerous start before they are discovered, Alfred the Great ordered the people of Oxford, England, to cover their fires every night at eight o'clock. He had a bell rung at this hour, called the curfew, which was the signal to cover fires, put out the candles, and go to bed. No doubt many people objected to this law because they

thought it interfered with their liberties, but ever since then we have been learning that the rights and welfare of the community or town as a whole must come before that of any one person.

William I ordered every city and town in England to have a curfew bell. Any one who refused to put out his lights and cover his fires at the ringing of the curfew was severely punished. The bellman at London rang his bell and called out: "Take care of your fires and candles, be charitable to the poor, and pray for the dead." The curfew law was afterward abolished, or done away with, but many towns in England still ring the curfew bell at eight o'clock.

In the days of Richard the Lion-hearted, every family was ordered to keep a ladder or two ready to give aid to their neighbors, and a barrel full of water before their doors for quenching fires. At last the government of every town employed a fire officer, called the bellman, whose duty it was to stay awake through the night and ring a great bell to arouse the people and summon them to help put out a fire, for there was then no such thing as a fire department.

All fires were fought by neighbors rushing in with their buckets and forming a line to pass pails of water along to the fire. We can imagine much of the water splashing out of the bucket as it passed along the line, and we can see many people coming to the fire without buckets. Perhaps they had none, or could not find them in the dark. So in Queen Elizabeth's time every householder was required by law to keep in a convenient place a leather bucket for fighting fire. Leather buckets, ladders, and hooks made up the fire equipment of those days.

Fires increased in number and ferocity as the towns

and villages grew, and the citizens began looking for a better means of protecting their homes and families. Some one rigged up a big pump with a handle long enough for a dozen or twenty men to work at the same time. Thus the water from wells and cisterns could be pumped directly into the burning building. This pump on wheels, operated by a number of men who came to see the fire, was called the fire engine. It was an improvement over the bucket brigade, but it still proved useless in the presence of a big fire.

Another drawback in fighting fire in those days was the fact that there were no regular firemen on duty that could be called upon at a moment's notice. Fires were fought by townsmen who came as volunteers, and if but few turned out, the fire got such headway that it was soon beyond checking. After the Great Fire of London, the city government organized fire companies with paid firemen. There were at first twelve companies. Each had an engine, or pump, thirty buckets, three ladders, six pick-ax sledges, and two hand squirts.

Through the carelessness of a few, many fires broke out and spread over large areas, burning out hundreds of people. No one was safe from the careless man's deeds. At last a law was made fining any one who was responsible for a fire. The fine was placed at a hundred pounds, or five hundred dollars, and if the offender could not pay, he was put in prison at hard labor for a year and a half. Do you think such a law would be desirable in our cities to-day?

The Fire Department of New Amsterdam. — Among the first fire officers in America were the fire wardens in New York, or New Amsterdam, in 1656. Leather buckets were soon ordered, and after a time every family was required to have a leather bucket hung up ready for use.



Fire Engine used in Brooklyn in 1785.

Bakers had to have three buckets, and brewers six. Every householder found without this bucket was fined six shillings. Not long after this the first fire engines, which were merely hand pumps, were brought over from London.

For a long time these hand engines had to be placed very near the fires because they had no flexible hose, and many of them were burned. A leather hose was later invented at Amsterdam, Holland, by two Dutchmen, both named Jan Van der Heide. These hose could be joined to form long pipes. One section could be let down into a well or cistern to suck up the water while another section carried the water to the fire.

The Steam Engine. — A steam fire engine soon followed the discovery of steam power. Though the fire officers refused at first to buy one, they changed their minds when they saw one actually at work, for they were much more



A Steam Fire Engine.

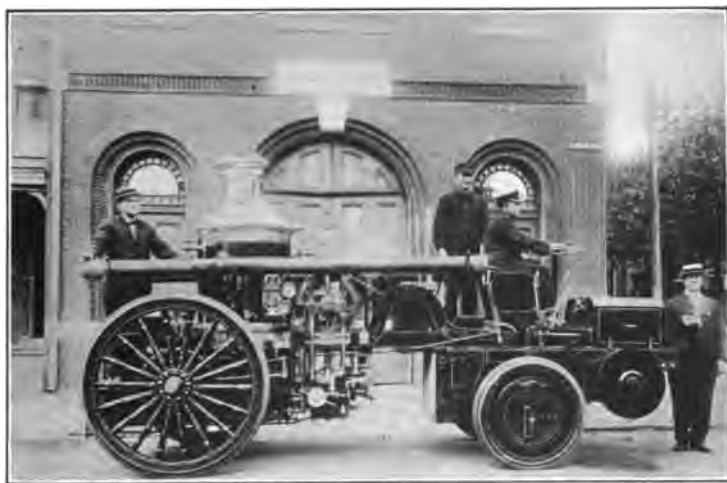
powerful than the old hand engines and carried water long distances.

Modern Fire Departments. — To-day every city and every village of any size has its fire department. The modern departments have huge fire engines that belch forth great quantities of water — some as much as nine hundred gallons a minute. Motor fire engines and motor trucks are rapidly displacing fire horses in the best fire departments. The hook and ladder wagons carry scaling ladders to reach to upper story windows, but they are not often used, because in most large cities there are strict laws requiring fire escapes and fireproof stairs on all high buildings. The greater cities have water towers that aid in fighting a fire on tall buildings. Every hook and ladder truck carries a life net which has strong springs in it. This life net is used to catch people who must jump or perish. Under modern conditions it



Courtesy of Front Drive Motor Co.

An Automobile Hook and Ladder Truck.



Courtesy of Front Drive Motor Co.

An Automobile Fire Engine.

is seldom needed. Most cities having a water front are provided with one or more fire boats, or tugs, which can usually pump ten times as much water as a fire engine. Chicago has six fire tugs, each of which can deliver nine thousand gallons of water a minute.

Besides ordinary fire engines, all the large cities are using



Fire Boat.

chemical engines which carry tanks filled with a fluid, a small quantity of which will put out a great bulk of fire. These chemical engines are usually first at the fire and the first in action, for they carry hose already attached. Chicago has also nine hook and ladder trucks that are provided with chemical tanks, each of which carries from fifty to seventy gallons of fluid. This fluid evaporates quickly, leaving little drip. It does less damage than water to the contents of a burning building.

The annual loss by fire in the United States is over a

hundred million dollars, and about half of this damage is caused by the water used to extinguish the fires. When only the large hose, that belched forth tons of water, was used, there was no way to shut off the supply quickly; for the order had to be passed along to the engineer, who was some distance from the man who managed the hose. To-day in Boston the firemen push an electric button near the nozzle to signal the engineer. If they press the button twice, it means: "Turn on water." Three rings means "Less water"; five rings, "Stop." In some other cities the amount of water is now regulated by adjusting the nozzle. By these devices tons of water are saved, as well as millions of dollars' worth of property. Nearly every hose wagon in certain cities carries several sizes of hose. The small sizes are easy to handle and save much time in fires that are easily extinguished.

Trained and Salaried Firemen. — Large cities are starting schools for firemen, where the men in training go through drill just as they do at fires. A man must have steady nerves and a cool head to be a good fireman. He may have to leap from a high window into a life net. He must be skillful in using the scaling ladder, and be able to carry down a victim suffocated by smoke.

Paid firemen give better and quicker service than volunteers. It is most important that the firemen reach the scene quickly, because it is the first few minutes after a fire starts that determines how big and destructive it will be. Volunteer firemen who are busy with their own occupations cannot get to a fire so promptly, nor can they fight it so well as those who are ready to jump on the fire apparatus the moment the gong sounds, and who have had years of experience in fire fighting. Paid fire departments usually include horses or motor engines as well as men,

and no time is lost in sending for a team, because the horses are trained to dash from their stalls to their places before the engine the instant the gong rings. The harnesses fall into place on their backs and a few snaps are hooked, the firemen leap on the engine, the door swings open, and away they go on a gallop. Everything on the



A School for Firemen.

street makes way for them at the sound of the gong, for their mission is to save lives and property. Firemen are chosen according to their grades in the civil service examination or according to merit shown in the training school. They may keep their positions for life, if they are expert in their work and faithful to duty.

If any servants or officers of our cities deserve to be pensioned when too old to work, surely it is the firemen; and most large cities are adopting pension systems. After

twenty-two years of service in Chicago, the firemen are retired on a pension, which means half pay for the rest of their lives. If a fireman is killed, his widow is pensioned for life; and the children who are under age also receive a small pension until they reach twenty-one years of age and are able to take care of themselves.

Expenses. — Aside from the money for pensions and the salaries of the fire chief and his men, it costs a great deal to buy horses, engines, and other equipment for the fire department. Where does this money come from? A part of the taxes that all property owners are required to pay each year is set aside for the upkeep of the fire department.

The Fire Patrol. — Before the days of the chemical engine and the adjusting nozzle, or shut-off, the great amount of water pumped into burning buildings often did more damage than the flames. Insurance companies, who have to pay for most of this damage, began to organize fire patrols which are called, in some cities, salvage corps. These patrols rush to all fires that break out in the business districts, to protect the goods. They carry loads of rubber blankets to spread over merchandise that may otherwise be damaged by water. They also operate the sprinkler systems within the buildings. While they do some fire fighting, their chief work is to protect and to save goods and furniture from damage that the insurance companies would have to pay for.

QUESTIONS ON THE TEXT

1. In what way was fire a help to primitive man? 2. Why was fire especially dangerous to ancient villages? 3. How did the Romans fight fire? 4. Of what use was the curfew? 5. Describe the first fire-fighting equipment. 6. Tell about the bucket brigade. 7. About the first fire engine. 8. In what way were paid firemen found to be better than volunteers? 9. Tell about the first American fire

department. 10. What bearing on fire fighting has the invention of the first leather hose? 11. Describe modern fire departments. 12. What are chemical engines? 13. What is the school for firemen? 14. What is the fire patrol?

QUESTIONS ON YOUR HOME CITY

15. What are the firemen paid in your city? 16. Does your city pension its firemen? 17. What difficulties are encountered in fighting large fires in your city? 18. Can you suggest improvements for your fire department? 19. What would you do in case of a fire?

CHAPTER XX

FIRE PROTECTION

Fire Loss in America. — It has been estimated that we burn up in America every week of the year on the average three theaters, three public halls, twelve churches, ten schools, two hospitals, two asylums, two colleges, six apartment houses, three department stores, two jails, twenty-six hotels, one hundred and forty flats and stores, and sixteen hundred homes. Fires in the United States are said to cost over \$500 a minute.

Suppose we try to picture to ourselves what these many millions of dollars' worth of valuable buildings in which fire annually rages would look like. Suppose it were possible to bring the buildings that were visited by fire in 1912 all together and to range them on both sides of a long city street. This street would reach all the way from New York to Chicago. That is what the annual fire loss of the United States represents — a closely built-up street a thousand miles long with every structure in it ravaged by this destructive element.

“Picture yourself driving along this terribly desolated street. Every thousand feet, you pass the ruins of a building from which an injured person was rescued. Every quarter of a mile there is a blackened wreck of a home in which some one was burned to death.” Every year a new street a thousand miles long is consumed. The money loss from fires in our country in one year is astounding. The

annual loss in a single city like Boston is about two million dollars.

Loss of Life. — The number of lives lost is still more appalling. In the year 1907 about fifteen hundred persons perished in the flames of burning buildings, while more than five hundred others were reported injured. Many deaths and injuries were not reported. Only when we remember that all this frightful loss of life recurs year after year can we understand why it is such an important part of city government to check the number of fires.

Great Disasters. — Some unusually terrible fires go down as a part of history. The Iroquois Theater in Chicago burned in December, 1903, with a loss of nearly six hundred lives, mostly women and children. The Boyers-town, Pennsylvania, opera house burned in January, 1908, killing nearly two hundred persons. In March, 1908, the schoolhouse at Collinwood, Ohio, was swept away by flames and 165 pupils were burned or killed.

Conflagrations. — The greatest fire in the history of the world was the burning of the city of San Francisco in April, 1906. There have been other dreadful fires in recent times, notably the Boston fire, the Baltimore fire, and the burning of a great part of Chicago. But that at the Golden Gate was the most widely destructive. Four square miles of the heart of the city were licked up by the flames. They swept 490 blocks entire and partially consumed 32 others. Property to the amount of five hundred millions of dollars was destroyed, and only half of it was insured. Most of the great business blocks that were supposed to be fire-proof burned also, because they were not provided with means of fighting fire. Few of them had metal shutters or wire-glass windows or sprinkler systems such as are now found in most up-to-date buildings. They had no tanks



The San Francisco Fire, April, 1906.



The Ruins.

or pumps of their own. A few buildings that had these appliances were saved, even though they were surrounded by fire.

Causes of Fire. — More than half of the fires of to-day are due to carelessness. The Fire Marshal of New York in 1906 reported that 887 fires of that year were due to carelessness with matches, 228 were due to children playing with matches or fire, 410 to lighted cigars or cigarettes, 419 to overheated stoves or stovepipes, 252 to bonfires or burning brush, 386 to carelessness with candles and tapers, 216 to gas light in contact with curtains, 161 to lamps upsetting or exploding. Besides these, there were 2064 fires whose causes were not known, but most of them were probably due to the same carelessness. Some cities are forbidding the use of sulphur matches because they are so dangerous in the hands of children. The safety match which can be lighted only by striking it on the rough part of the match box is generally preferred. Ten thousand matches are scratched every second in the United States, and it is estimated that 900 people lose their lives annually from the use of parlor matches. Gasoline is the cause of a large number of fires.

Protection. — *Fireproof Roofs.* — Shingle roofs are sometimes set on fire by sparks or burning embers carried by the wind. In the great Chicago fire many buildings nearly a mile away from the conflagration caught fire from burning shingles, and thus fires broke out in many parts of the city at a time when the fire department already had more than it could handle. For this reason it would be well to prohibit all kinds of wooden roofing for buildings within city limits. A fireproof roof not only protects a building from distant fires and those close by, but if a fire breaks out inside the structure itself, the roof may hold it in check

until the firemen can put it out. When a fire once breaks through the roof, it burns very rapidly, because it then has a draft and a suction power.

Fire Escapes. — Some fire escapes are so poorly constructed that people are afraid to use them. The straight iron ladders fastened on the outside of buildings are so dangerous for people unaccustomed to them that they are of service only to the firemen. Sometimes the stairway fire escapes that are properly built are blocked up with barrels, boxes, and rubbish. In case a fire starts, such carelessness often causes serious loss of life. When the person seeking to escape finds his way blocked, he either jumps to his death or is burned because of the delay. Any boy or girl who discovers a fire escape that is clogged should report it to the police.

Nearly half the fires in New York City occur in crowded tenement houses which sometimes run up six or eight stories high. Here is where firemen have their hardest work to save the lives of women and children. The laws of most cities to-day tend toward requiring stairway fire escapes on all buildings of several stories and two escapes on each tenement — one in front and one in the rear. Fire escapes not only enable many people to save themselves, but they aid firemen to rush in quickly and rescue others who may have suffocated from smoke or who have fainted.

The number of fire escapes a building must have depends upon the floor space and the number of people who do business within. Where a fire escape passes a window, the window must have wired glass and metal frames and sash. There must be signs on every floor pointing out the fire escapes.

Fireproof Stairs. — *Halls and Elevator Shafts.* — In buildings of many stories all stairways and elevator shafts must

be fireproof, because if otherwise they would act as chimneys to create a suction or draft to help the fire along. But if they are fireproof and are provided with metal doors that close of their own accord when heat approaches them, the fire may be more easily confined and put out on the floor where it started. Most cities require their many-storied tenement houses to make their stairs and stair halls fireproof. Some cities are forbidding the narrow chimney-like air shafts, which accomplish little good in admitting air and may do much harm by aiding fires to leap through every floor of a crowded tenement.

Doors and Stairways. — In many places the new fire laws provide that all the entrance and exit doors of public buildings must open out. In a fire panic the people inside are apt to rush together in a body toward the door. If the door opens in, the crowd will pile up before it in a terrible crush so that it cannot be opened at all, and the poor victims will perish in a heap. Doors of public buildings, such as schools, churches, and theaters, should have fastenings easily operated from the inside. A good device is the safety door push. These are long handlebars which are placed across the door and merely pushing up on them opens the doors at once. In the fire at Collinwood, Ohio, children piled up by the score before a door that was fastened with a key, thus losing their lives right on the threshold of escape. All stairways in public buildings are now being built with easy rises, wide treads, and frequent landings. The fewer sharp turns a stairway has the safer it is.

Protection of School Buildings. — Wooden school buildings should not be allowed except in country districts, where they do not exceed one story in height. Schools with masonry and wood joist construction may be built in small towns where a two-story structure is large enough. In

this case all stairways and halls should be built of fire-resisting materials, and the boiler room must be safely cut off from the rest of the building by fireproof walls. Most schoolroom fires originate in the heating apparatus or storage rooms in the basement of the building. Boiler rooms need have but few doors, and these should be fire-



A Fire Drill, Washington School, Evanston, Illinois.

proof and so constructed that heat will melt the fastenings that hold them open so they will close of their own accord. Every good-sized school to-day has its special fire gong and fire drill. A well-drilled school is able to vacate a building in three minutes, or in less time. The greatest trouble lies in keeping the children from returning to the building for valuables and wraps.

Theaters. — Since the fire in the Iroquois Theater in Chicago, which took about 600 lives, every theater is required by law to have a fire curtain which cuts the stage

off from the rest of the building. These curtains are made of fire-resisting material to keep the flame, smoke, and gases from spreading into the audience room. The fire curtain is operated by hand, and by electricity or by water power, so that nothing will prevent its prompt lowering. Fire curtains, if genuine, will check a fire for fifteen or twenty minutes until the people in the auditorium have a chance to escape. The law also provides that all exit stairs, fire escapes, and balconies must be kept free from obstructions and from snow and ice. The stairways and halls should be well lighted; and should have a rigid wall rail so they can be safely traversed in case there is darkness.

Protection of "Skyscrapers." — The "skyscrapers" and other tall structures are now made fireproof. They are provided with automatic sprinklers that shower down floods of water if a fire starts. A certain degree of heat from a fire sets these sprinklers going. Buildings of several stories are required to have an inside standpipe, or water supply pipe, which passes up to the top of the building. On each floor is an attachment for hose. When a fire breaks out, the fire engine hitches to this standpipe and pumps water to all floors. As a rule there is also an outside standpipe extending up alongside the fire escape.

The Fire Limits. — All of our large American cities have drawn about the crowded part of the city a line which is called the fire limits. Within the fire limits no frame or wooden buildings may be erected. It is outside these limits, however, where the greatest fire loss occurs. The firemen of Chicago desire to make the fire limits the same as the city limits, and thus forbid the erection of wooden buildings anywhere in the city.

Fire Protection in Europe. — We have in America very high-class fire departments, brave firemen, and the best

fire-fighting machines to be found anywhere in the world; and yet our fire losses are from five to seven times larger than those of Europe. The same is true of the number of lives lost through fire.

In Europe the people are so careful and the building laws so strict that most city fires are confined to the floor where they start. Occasionally one destroys the entire building, but it is very seldom that it spreads beyond the structure where it began. In most of the large cities of Europe the strict laws have forced the use of brick or stone for all new buildings, and very few timber or wooden buildings can now be found within the city limits. In most countries every owner of a building, or landlord, is held responsible for all the damage done to tenants or neighbors by a fire that started because of his negligence. On the other hand, the renter or tenant must pay all damages if he is to blame for the conflagration; and so every one is careful to have his premises as safe as possible from fires.

In Berlin the fire police regularly inspect all places where explosives are stored and all apparatus for heating and lighting buildings. All stoves, fireplaces, furnaces, flues, ash bins, and chimneys are periodically inspected by the police. Gas stoves must not be supplied through rubber tubing, and all flexible tubing must be covered with asbestos. Every chimney, whether in use or not, if it is connected with an inhabited building, must be regularly cleaned by one of the authorized force of chimney sweeps. In consequence, Berlin is almost free from serious fire losses, and the expense of fire protection and of fire insurance is greatly reduced.

What to Do in Case of Fire. — If you see your school is on fire, go quickly and ring the fire alarm and open wide the

doors. When you are sure your home or apartment building is on fire, shout aloud "Fire! Fire!" and run down the stairway; or if the stairway is full of fire and smoke, go to the fire escape, closing all doors behind to keep the fire and smoke from following. Remember that open doors and windows make a draft that feeds the fire. If you cannot escape by a stairway or by way of the fire escape, then go to a front room and stand up in a window so the firemen can see you. If you must pass through dense smoke, crawl on your hands and knees, for there is less heat and smoke near the floor. The firemen will save you with ladders, or they may hold out a life net and tell you to jump. You must not hesitate. Look up and not down, and step off, relaxing your muscles so your body will be limber; and in an instant you are safe in the life net. If the fire occurs at night, it is safer not to stop to dress but to wrap a blanket or counterpane about you and save your life by escaping quickly. Cover the mouth and nose closely if you must pass through smoke. Careless bystanders often lose their lives at big fires because they approach too closely and are caught by falling walls or timbers. Firemen sometimes perish too, but being accustomed to danger they know better how to guard their lives while they fight the flames.

QUESTIONS ON THE TEXT

1. Tell the story of the thousand-mile street.
2. Tell about some fearful disasters and conflagrations.
3. State the most common causes of fires.
4. Why are tenement fires so disastrous?
5. What requirement should be made as to the fire escapes on tenements?
6. What kinds of fire escapes should be prohibited? Why?
7. Why should stairways and elevator shafts be made fireproof?
8. Give some good rules about doors and stairways in public buildings.
9. Tell about the awful school fire in Collinwood, Ohio.
10. What rules should be followed as to fireproofing school buildings?

11. What are fire curtains in theaters? 12. Describe the Iroquois disaster. 13. How are skyscrapers protected in case of fire? 14. What is the purpose of wired glass in windows? 15. What are fire limits? 16. Compare fire protection in Europe with America. 17. Why are wooden roofs forbidden in European cities? 18. What should you do in case of fire in your home? 19. In your school?

QUESTIONS ON YOUR HOME CITY

20. Discuss some large fires you have seen. 21. What was the origin of the fire? 22. If your city has tenements, are they properly supplied with fire escapes? 23. How are your factories and large stores protected? 24. How do they safeguard their employees and patrons? 25. Find out from your city fire chief the chief cause of fire in your city. Other causes. 26. Do all the doors of your churches, public halls, and schools open out? 27. Why should they? 28. Read your city ordinances that bear on fire protection. 29. Has your city fire limits? 30. Some fire chiefs say that the fire limits should be the same as the city limits. Who would object to this? 31. Does your school have fire drills regularly?

CHAPTER XXI

TAXES

A Brief History of Taxation. — In the olden days when people lived mainly in the country and were ruled by kings there was not such great need of taxes. The kings often owned large estates called crown lands and the produce from these lands helped to keep up the king's court, pay his officers, and provide somewhat for his soldiers when they went to war. In those days also the government undertook very little service for the people and, for this reason, it did not need so much money. But as the needs grew, the people were gradually called upon more and more to aid the king and support the government.

In early Britain, before the Romans came, money was scarce and the people paid their taxes in kind, usually a tenth. This means that if a farmer had ten sheep, one of them was taken for taxes; if he raised twenty bushels of wheat, two bushels had to be delivered at the government's granary, or barn. This farm was often many miles away and the roads were oftentimes so bad that it was a great hardship to get the poultry, stock, and grain delivered at the royal granary. Consequently we hear of many complaints about the taxes in those early days.

Taxation in the American Colonies: *Virginia*. — In early Virginia the people were compelled to bring all their produce to a common public storehouse. To this storehouse the people came for all their supplies of food and clothing. As

the lazy people got as much from the storehouse as the industrious, many became dissatisfied and refused to work.

Presently, however, war broke out with the Indians and the people had to build forts and provide food for their soldiers. As some preferred to stay at home, they were taxed five pounds of tobacco for each man to support the army. Gradually new officers were needed, such as judges; and there were other necessary expenses; to meet these needs, a tax of one bushel of corn for each man was laid. From this beginning the taxes grew in amount with each year according to the needs of the government. These taxes were paid in tobacco for many years.

Taxation in New Amsterdam. — The Dutch at New Amsterdam exported two articles to Europe in large amounts, — tobacco and furs, especially beaver skins. The government concluded to tax these two articles when they were shipped from the colony. Such a tax is called an export tax.

As the merchants did not like to pay the tax, they sometimes avoided it by shipping the furs or tobacco overland by wagon or pack horse to New England or Virginia, where they could be put on shipboard for Europe without tax. This means of transportation brought about the result that the government of New Amsterdam was presently not getting enough money from the export taxes. They planned a tax, therefore, on beer, wine, and liquor. As there were numerous distilleries, breweries, and winepresses, this tax was easy to collect and brought in considerable money. Such a tax may always be added to the price of the article and is really paid by the people who buy and use it. This is called an indirect tax, because it comes indirectly from the man who consumes the articles that are so taxed.

Then the governor began to levy a direct tax on real property, such as land, houses and lots, cows and oxen. As the taxes from such property were paid by the owners directly to the government, they were called direct taxes. It is this kind of taxes that we commonly pay to-day to support our towns and cities.

Taxes in New England. — In early Connecticut the first tax that we read of was a war tax, for war was declared against the Pequot Indians in 1637. The towns were to furnish as taxes certain armor for the soldiers, also biscuit, meal, butter, bear meat, corn, and other rations.

Taxes and debts were usually paid in New England in those days in corn. The city of Hartford furnished forty-two men and eighty-four bushels of corn; Windsor, thirty men and sixty bushels of corn; and other cities furnished men and corn in the same proportion.

After the war was over the colony found itself in debt; then other taxes had to be levied. They were to be paid either "in money or in wampum, four for a penny or in good beaver skins at nine shillings per pound." Two years later the people were taxed to build a meeting house. And before a dozen years had gone by the people had laid a poll or head tax upon male persons over sixteen.

American cities have not worked out a fair and just tax system, and a great deal will be left to be done by the coming generation, among whom will be the boys and girls who read this book.

Necessity for Revenue. — We have learned of the many services to the people of a community, such as health, fire and police protection, street cleaning, the library, the public schools, and a score of other blessings, secured through their government. Besides the cost of these there are numerous

city officers — clerks, judges, engineers, and many others — who must receive a salary. All in all, the modern city spends a great amount of money each year. Without money, our governments would be helpless. One of the most important duties of any government is the raising of revenue, because a city can have only such comforts and conveniences as the citizens are willing to pay taxes to support.

Ways of Raising Money. — There are besides taxation, however, a few ways in which a city may obtain an income. For certain services of the city government a fee is charged, and aside from this many businesses are required to pay an extra tax in the form of a license. Each saloon pays the regular taxes on the building and contents, and, in addition, the business is taxed for a license. There is usually a wheel tax demanded of all teams and wagons, an automobile license, and various other means of getting revenue to pay for improvements and services of the city government. But the chief income to the city is from real estate and personal property taxes.

Under real estate is usually classed the bare land, including buildings and all permanent improvements. Under personal property come live stock, vehicles, furniture, stocks and bonds, cash money, and various other things.

The Levying and Collecting of Taxes. — The city makes an estimate of the money it will need to take care of the various departments of the government for the ensuing year, and this amount is levied upon the property found and valued by the assessor. Every property owner must pay the taxes assessed against his property, or else the city government may sell it to the highest bidder, take the taxes due from it, and return the balance to the former owner. Taxes not paid when due are said to be delinquent.

Some kinds of property are exempt from taxes. For example, all public property, such as parks, schools, city halls, and other public property, are free from taxes. So, also, are churches, colleges and other higher institutions of learning.

A Competent Assessor. — The citizens should exercise much care in electing an assessor who is both honest and a good judge of values. Men of the best judgment often lack the experience to value the stock of a lumber yard, a warehouse, a railroad, or the contents of stores. Here they must rely upon the owner, who is strongly tempted to undervalue his wares to save his purse.

Unfairness in Tax Assessment. — In most places in the United States the taxes are in a badly mixed and confused condition. They are also unjustly levied. In the first place, many kinds of personal property can be easily concealed from the assessor, whereas real estate cannot. Thus many wealthy people and rich corporations put their money into stocks, bonds, and notes which they can neglect to report to the assessor and thus avoid paying their just taxes. Again, the assessed valuation placed upon property varies widely. In some places property is assessed at its full value, in others as low as 25 % of its value.

The people of moderate means who own their own homes and farms must pay more than their just proportion, while the wealthy often have means of escape. Nearly every one, rich or poor, who gives in personal property to the assessor puts a ridiculously low value upon it, if he reports it at all. This operates to the great disadvantage of all conscientious taxpayers, making their proportion much too heavy. Our present tax methods are so bad that very few people give

in their property in full, because if they did, they would be paying more than their share of taxes.

Sometimes the assessor is said to favor friends who have helped to elect him. The people or corporations favored in such a case would be anxious to keep this corrupt assessor in office as long as possible. Good public officers, honest citizens and corporations do not favor such practice.

QUESTIONS ON THE TEXT

1. Why were the taxes light in ancient times? 2. What is meant by taxes in kind? 3. Why are such taxes not used to-day? 4. Discuss taxation in early Virginia. 5. In New York. 6. In Connecticut. 7. Name the chief city needs that require tax money. 8. In what other way than by taxes do cities obtain funds? 9. What is the difference between real estate and personal property? 10. How are taxes usually levied? 11. What property is exempt or free from taxes? 12. What good reasons can you give for this? 13. Upon what class of people do taxes fall most heavily? 14. Why are people liable to undervalue their property? 15. What qualities should an assessor possess?

QUESTIONS ON YOUR HOME CITY

16. Does your city tax autos, vehicles, dogs, and the like? 17. For what purpose should the wheel tax be spent? 18. What properties in your town are free from taxes? 19. Does your city get enough money from taxes to pay good salaries and build good school buildings fast enough to give all children the best opportunities? 20. What desirable improvements could be made in your city if funds could be had to pay for them?

CHAPTER XXII

GOVERNMENT

Home Government. — Let us imagine a family living so far away from other people that they had no relation to the rest of the world, but were forced to provide their own food, clothing, and shelter. Such a family would have hard work to keep starvation from the door. One of the first things they would have to do would be to divide up the work so that each member might bear his part of the family burden. Thus they would need rules, or laws, deciding who should cook the meals, build the fires, make the clothing, raise the crops, bring in the food, and the like. Home laws are usually made by the father and the mother after they have carefully consulted the best interests of their children.

Besides the making of the laws there would need to be somebody to enforce the rules, because the sons and daughters might not be willing to do their share of the work or might refuse obedience to even the most reasonable home laws. So the father and mother, being the older and wiser members, set themselves up as rulers. Or if the children should quarrel over their work and start to fight for their rights, some one would have to act as a judge to settle the dispute and prevent bloodshed.

Thus we have in this lonely family a real government of three departments. There are rules or laws that must be obeyed, with some one to make them; there are rulers to

enforce obedience to the laws ; and there are judges to settle disputes and make fair decisions when trouble breaks out in the home circle. Every family, as well as every state and city, must have lawmakers, rulers, and judges.

Social Interdependence. — There are many comforts and luxuries of life that this lonely family could not provide for itself. It could not have a school or library or church or many of the comforts that people living in communities enjoy. And the chief reason for the lack of these things would be the cost, which one family could not afford to pay. Such a family would eagerly welcome the day when other families settled near by, because a number of them by putting their means together could provide a school, a church, and better roads, as well as many other things that civilized people need and enjoy. In short, they could do many things jointly that no one of them could do alone.

Advantages of Community Life. — We now understand how it is that the greater the number of people living in one community, the more wants they can satisfy by joining their efforts and working in common. For this reason a city can have more comforts than a smaller community can. Cities easily afford electric lights, gas, city water, good fire departments, well-paved streets, parks, libraries, schools, and all the other institutions that contribute to the comfort and the welfare of their citizens.

Society's Need of Government. — The closer people live together, the more disputes arise among them, so there must be a way to make laws and settle disputes. When men decide to do certain things of common interest and pay for them in common, they form a state or city government. Then officers are chosen to carry out the wishes of the people of the community or the state. Since many

minds seldom agree, questions are settled according to the wishes of the majority.

The Three Departments. — Laws for the state must be made, and for this purpose certain citizens are chosen by a majority vote, who form a body called a council, a legislature, or a congress. There are always some citizens in every state or community who are unwilling to obey the laws, so an executive is needed to see that obedience is enforced. Such an officer may be called a king, a president, a governor, or a mayor. Honest men frequently have disputes, or they may disagree as to what the law means. So the state must have judges whose business it is to explain the law and to decide disputed cases. And so we have again the three departments of government — legislative or lawmaking, executive or law enforcing, and the judiciary, which explains laws and acts as judge in case of disputes.

Complexity of City Government. — While city people have more conveniences, they are more likely to come into conflict with one another when so many live in so small an area. They constantly get in one another's way and interfere with one another's plans and business. Therefore the city community must have more laws, more officers, and a more complex government in every way. The closer people live together, the more careful they must be to consider their neighbor's rights. A man living a lonely life can be as selfish as he chooses, but when he comes to live among other people, he must give up his selfish habits and consider what is wise for the community as a whole. A man living on a farm may throw his garbage into the street or live amidst filth that causes disease, and perhaps no one is affected except himself and his business; but such things will not be tolerated in a city, where his carelessness would affect the welfare of his neighbors.

QUESTIONS ON THE TEXT

1. Why are laws necessary?
2. Why are judges needed?
3. Name the three departments of government and tell what is the work of each.
4. What are some of the advantages of city life?
5. Why must city governments be so complex?

QUESTIONS ON YOUR HOME CITY

6. Can you suggest three departments of government in your city?
7. Name your chief city officials.
8. What advantages have you over a man living on a farm?
9. Mention several cases of dispute occurring in your city that could not occur between farmers.

CHAPTER XXIII

CITY GOVERNMENT

Difficulties of City Government. — The duty of enforcing law and keeping order in a city is a very difficult task, especially in a large metropolis. Here are found thousands of foreigners who do not speak our language and are ignorant of our laws. There are also many citizens who thrive by dishonest and unlawful trades and practices. Worst of all, in the thronging streets there are all sorts of criminals looking for a chance to steal money and valuables or to take advantage of unprotected people.

Why Cities are so badly Governed. — One reason why so many cities have been badly governed is that it is not always an easy matter to elect a good mayor and council. The saloons, gambling dens, and other resorts that do not like to obey the laws, wish an easygoing mayor who will let them do as they please. They are willing to work hard and contribute liberally to elect their candidate. Then there are often unfit men who want an easy city "job"; so they hustle to get the votes for the careless mayor with the promise, or at least the hope, that if he is elected they will be rewarded. Sometimes the public service corporations, such as the street car companies, the gas and electric light corporations, have been interested because they wanted a new franchise. They naturally desired to elect the easygoing candidate, for he might not insist on driving a hard bargain with them in favor of the citizens of his community.

These companies are sometimes ready to join with the other people who have selfish purposes and to devote time and money to the election of such a man.

On the other hand, the honest citizens and business men who have no private interests to push, often forget to vote; or they fail to unite on a worthy candidate who will care for the interests of the city as a whole. This unpatriotic and lazy attitude is rewarded by years of corrupt city government, for the evil forces easily carry the day by uniting their strength. Then vice and wickedness go unpunished, and gamblers and criminals flourish, placing danger and temptation in the way of every family in the city. This evil might be prevented if the stay-at-homes would take the proper interest, join in supporting a good candidate, and work hard to get out honest voters.

Since the evil elements unite to elect their candidate no matter to what party he belongs, our wisest citizens are coming to see the wisdom of doing away entirely with party candidates in city elections. This would bring about the union of all sincere voters regardless of the party to which they belong; and since we believe that our honest citizens outnumber the bad or careless ones, there is no doubt that they could elect good men to office. Nonpartisan elections will be a long step toward decent and clean city government.

The Mayor. — Some of the best-governed cities of the world are those of Germany. They do not choose a citizen who is totally inexperienced as their mayor, but they look about over the other cities of the empire, and when they have found an exceptionally strong mayor in some other city, they take him for their city by offering him a higher salary or some other inducement. Then they keep him for

a long term of years, perhaps for life, giving him a pension when he is too old to serve them. This is the way business men choose their superintendents, and the way school boards elect their heads of schools; and it is undoubtedly the best way to secure a good, competent, and clean executive.

The mayor is elected for the serious duty of keeping peace and order and protecting people's rights and property. He is the chief officer of the city government. He not only enforces law and preserves order, but in most American cities the mayor has a share in lawmaking. Every bill or ordinance passed by the city council must be sent to the mayor to be signed before it becomes a law. In most cities, if the mayor vetoes the bill, — that is, refuses to sign it, — it may again be brought before the council; but this time it must have a much larger majority in order to become a law without the mayor's signature. As a rule, the mayor's veto kills a bill, because it is hard to secure the necessary large majority in its favor on the second vote.

The Police Force. — In thinly settled country districts, it is difficult for a thief or other criminal to conceal himself, but in the crowded city escape is much easier; and there are all kinds of valuables that can be carried away and quickly disposed of. Men with a bad record take refuge in the city, which has certain districts that are hotbeds of lawlessness. There are criminals among the rich as well as the poor. There are some with bright minds as well as stupid.

Society must be protected from the criminal, and long ago city governments organized a force of men called police whose duty it is to protect property and life, to prevent crime, and preserve order in the city limits. They are

in reality the city soldiers, and the mayor is their commander. The police force is divided into classes of different rank, ranging from the patrolman to the superintendent, commissioner, or chief of police, who makes the rules governing the force. The city is divided into police districts or precincts, each of which is subdivided into "beats" and "tours" of duty that are to be patrolled day and night. Each precinct has a body of police, at the head of which is a captain who is responsible for carrying out the orders of the chief by issuing instructions to those under his command. For long "beats" or difficult work there are mounted police. In New York there are bicycle squads, and now the motor cycle has come into use to catch auto speeders.

In European countries the police are largely paid by the state, and are under its control; but in America they are paid entirely by the city government and are subject to the mayor's orders.

An important branch of the police service is the detective bureau, which consists of a force of men employed because of their shrewdness and ability to detect crime as well as for their knowledge of noted criminals. These officials are often called "plain clothes men" because they wear no uniform but a badge.

The Policeman and his Duties. — A good patrolman must have a firm but pleasant nature and polite address. He must have perfect control of his temper and never allow himself to be moved from his duty by pleading or threats. He is often called upon to settle disputes and to act as adviser. He warns those who seem about to take a wrong course, for it is the first object of the police to prevent crime rather than to punish it. A policeman should do his duty promptly and quietly, being careful not

to undertake a serious trouble without a sufficient force to aid him.

A patrolman is empowered to arrest persons charged with offenses or suspected of them; he may enter a house in pursuit of an offender or to search for stolen goods; he may interfere in a quarrel. By active and intelligent watchfulness, he checks and prevents the commission of many lawless deeds. The policeman is exposed to danger in his duty of protecting the public, where he bravely risks his life, sometimes facing brutal and murderous violence. The policeman who bravely does his duty deserves as much honor as any other courageous soldier.

The policemen regulate street traffic and control the passing at busy street crossings. This is one of their hardest duties. They take charge of and collect lost property. Thousands of articles are dropped, forgotten, or mislaid every year in large cities, and through the police department many are returned to their owners. Sometimes live stock are lost and later found in the hands of the police. These include rabbits, dogs, and cats, and even parrots and canaries. Then there are books, bicycles, weapons, mail-carts, golf clubs, musical instruments, to say nothing of sewing machines, found and cared for by the police.

Lost children are generally restored to their parents through the police station. It is a touching sight to see a lost child walking trustfully hand in hand with a giant policeman to some place of safety. Policemen often save human lives by stopping runaway teams. The story is told of a man in blue who saw a horse running away down a busy street. He was hitched to a buggy in which sat an old lady. The policeman jumped on behind a motor cyclist who happened to be passing, and, pointing to the galloping horse, told the motor cyclist to "speed up." When they

ran alongside the horse, the policeman grabbed the rein and stopped the animal, and the woman was saved. There are hundreds of just as brave rescues in a large city every year, and many times the policeman is injured in performing his duty. In London in one year, over two thousand policemen were injured while making arrests, and nearly a hundred more were hurt in stopping runaway teams.

Corruption in the Police Force. — In some of the large American cities, members of the police force have been found to be corrupt. They have been known to protect, for the payment of "hush money," saloons and gambling houses and other disreputable places that break the law. Where such has been the case, the policemen are said to divide this ill-gotten money. If the people engaged in law-breaking refuse to pay them the large price they ask to keep silence, it is claimed that they drag these people into court, where they are heavily fined and forced to give up their lawless business. Though there may be some dishonest men in every police department, as there are in all kinds of work, in the main our policemen are brave, faithful, and loyal guardians of the city.

QUESTIONS ON THE TEXT

1. What other duties has a citizen besides voting? 2. What is a nonpartisan election? 3. Why should party names be kept off ballots for city elections? 4. How do the cities of Germany choose a mayor? 5. What are some of the mayor's duties? 6. What may he do with his power of veto? 7. In what way is their system better than ours? 8. Why are there more criminals in the city than in the country, when the population in each is equally large? 9. Discuss the duties of the police. 10. What is a detective bureau? 11. What dangers does the patrolman meet?

QUESTIONS ON YOUR HOME CITY

12. Is your chief executive called mayor? 13. Does your mayor have the veto power? 14. For how long is he elected? 15. Does experience make a better mayor? 16. If so, is it well for your city to keep changing? 17. Can you give any stories of danger that policemen have faced? 18. What are the most desirable qualities in a policeman?

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CHAPTER XXIV

NEW FORMS OF CITY GOVERNMENT

Corruption in City Government. — There has been great waste of taxes by city governments in all parts of the country. Most of this waste has come through poor business management. The city government is a great business organization working for the people as a whole, doing service for the entire city, and spending the people's money for the common good. There are two reasons why the work has not been done as it should. One is because the men elected have not been trained for it and the other is because it has been in the hands of politicians whose business is to secure an easy job from the people. Because the men who have been placed in these responsible positions have not had their deeds examined by superior officers or scrutinized carefully by the people who elected them, it has been difficult to ascertain which officers have served their community faithfully and which have wasted the public money without return. Our governmental machinery is so complex, with its checks and balances and its divided responsibility, that it is difficult to fix the blame on any one officer. It is possible for one to shift the carelessness on the other, and meantime the public suffers and the taxpayers see their money misused or wasted.

Nor does this condition of affairs arise entirely from ignorance on the part of the officeholders. Some of them have been elected to their positions because of their friendship for political "bosses" or interested corporations;

and when they are in office they deliberately play into the hands of those who elected them, turning over to them valuable franchises or contracts for city improvement wherein there is a chance to get more than is earned.

A New Form of City Government. — In many cases the influence of the "boss" system has been pernicious, as has also been that of corporations that were seeking some private interest at the expense of the public and the taxpayers. The best citizens have therefore been searching for a better method of electing desirable men to office and a better organization of city government. Some few years ago Galveston and other Texas cities tried a new form of government called the Commission Form. Des Moines and other northern cities have since tried the plan.

Instead of the usual way of electing a multitude of officers, few of whom are personally known to the voters and many of whom are unfit for public service, the new system chooses a commission consisting of a small number of well-known men, usually five, in whose hands are placed the entire power and responsibility of managing the city government. The voters have time to investigate the record of these candidates and can cast their ballots intelligently and without asking the advice of selfish politicians. In this manner, better and abler men than those chosen under the old system are induced to serve the city. Responsibility is placed entirely in the hands of the men elected, and blame is easily fixed when things go wrong.

The city commissioners are generally chosen for longer terms than the officers under the old plan, and they are better paid. In some cities they may be recalled, that is, they may be dismissed by a vote of the people at any time if they have proved incompetent or corrupt. An election must be held in order to recall an officer.

The commission, acting like the directors of a business corporation, fill the various city offices by appointing men who are competent or trained in the work to be done. These appointed experts hold their places usually under civil service rule, and for as long a time as they do their work satisfactorily. The commission, however, is held responsible by the public for the kind of men they place in office.

Weak Points of the Commission Government. — Although the commission plan has proved a method of doing away with corruption in the city council and among other elected officers, it has its weak points. The men who compose the commission have great power; and if dishonest persons are chosen, so much the worse for the city. The advantage is that they are more easily convicted of wrongdoing and can be put out of office. On the whole, the fewer and more competent city officers chosen by the commission plan have proved far more efficient, honest, and economical.

Each commissioner is the head of some city department, such as that of finances or street paving. It is a temptation for one to say to the other: "If you will let me have my way in my department, I will let you manage yours as you think best." This would be very well if each man were chosen especially for his fitness in this department, but the people often fail to choose experts. Experts, indeed, often fail of election because they are not "vote getters." If the people do not elect a commission of experts, an unskilled man may be assigned to the street paving department, or an engineer to the finances. While the commissioners may all be able men, they may not fit into the several places. Thus, by each assuming full control of his department, the very end of the commission plan, which is the united judgment of several able men on important

questions, may be defeated. What is needed in each department is a trained expert.

Its Growing Popularity. — The commission form of government has spread with surprising rapidity, and three hundred cities in various states have adopted it; among them: Sacramento, Los Angeles, St. Paul, and even New Orleans, with its 350,000 population. It is popular in scores of smaller cities throughout the United States. Where it has been tried it is found to give the cities better officers, and it has often greatly reduced the taxes through economy and good business management. In Trenton, N.J., the commission saved \$100,000 to the taxpayers the first year it was in operation.

The City Business Manager. — Another form of city government is being tried in a few places with success. The people elect a small commission, or council of business men, who merely act as a board of directors. They do not give their entire time to the city affairs as do city commissioners, nor do they receive a salary of any consequence. They are in the same relation to the city as a board of directors is to a bank. This council of commissioners choose an expert business manager for the city, paying him a good salary. They give him full power to select his helpers and hold him responsible for a good, clean, economical administration of the city's affairs. The commission serve in the same capacity as does a school board, and the business manager serves the city as the superintendent of schools does in educational matters, appointing his expert helpers for the various departments.

It is less expensive to have one salaried official instead of five as in the commission plan. One head instead of several makes speedy action on matters possible. The business manager may be drawn as an expert official of

experience from another city, as the mayors are chosen in German cities; and he may be a permanent, trained, professional expert in all city matters. It is believed that the business-manager plan will spread rapidly, especially in the smaller cities.

Dayton's Stand. — The flood-swept city of Dayton, Ohio, has adopted the commissioner-manager plan of city administration. Dayton has a population of 125,000. After the flood in 1913, a government was needed that was speedy in action. Five commissioners were elected as a legislative body. They are to act as directors for the city and they may be recalled or dismissed at any time by a vote of the people. The commissioners have hired an expert manager to carry on the business of the city. To illustrate their care in choosing this important officer, it is said that they offered it to George W. Goethals, the master builder of the Panama Canal. When he declined the honor they searched very carefully for some one else who was exactly suited to the place. At last they settled upon Henry M. Waite of Cincinnati, a man of wide experience. He is the single head of Dayton and may appoint, discharge, and fix the salaries of his subordinates, who form a cabinet working under his direction. In this way he is responsible for anything that may go wrong with municipal affairs, and if necessary, he may be dismissed by the commission. Thus Dayton, for a large city, has a government carried on in a novel way. How well it succeeds depends upon the interest of the citizens of that community who are willing to do their duty as citizens, giving time and energy in support of the commission and in behalf of good government. No plan of government will run itself. The responsibility must fall back on the citizens.

QUESTIONS

1. Why have American cities been so badly governed? 2. Name two ways in which the people's money has been wasted. 3. Why is it difficult to fix the blame of mismanagement? 4. What is a political machine? 5. Why do not the patriotic citizens organize a *good* machine? 6. What is the commission form of government? 7. How does it divide the duties of ruling? 8. What is the recall and what merits has it? 9. Is the commission form of city government popular? 10. What are its weak points? 11. What is meant by a city business manager? 12. What can be said in favor of the business-manager plan? 13. Tell what you can of Dayton's new government.

PART II. THE STATE

CHAPTER XXV

HEREDITARY TYPES OF LOCAL GOVERNMENT

Colonial Government.—The men who built up our governments in America were English colonists who brought with them the customs and practices, offices, and forms of their homes in England. These they adapted or changed to suit their new surroundings in the wilderness. Because the conditions in New England differed widely from those of the Southern colonies, there grew up different types of colonial government.

The Township Government.—In New England the settlers found themselves in a land that was hilly with a stony soil. Streams were numerous, but generally small, rapid, and unsuited to navigation. There were many bays and harbors along the coast that invited seagoing occupations, while the forest yielded excellent timber for shipbuilding. These conditions prevented the colonists from spreading widely and thinly over the country. Moreover, these New England settlers were Puritans who desired to foster the religious life for which they had made great sacrifices; and they naturally grouped themselves into little church communities, living close together so that every one could take an active part in worship and the management, or government, of the church.

The New England colonists, therefore, put into practice

those features of township government in England that were best suited to the villages or towns in America. They built their tiny settlements along the shore of the sea and the banks of rivers, often inclosing them with stockades for protection against the warlike Indians. Each settlement was obliged to take care of itself, because it was separated by unbroken and almost pathless forests from the others. Each had a common pasture where the stock of all were turned to graze together, and officers were chosen to look after this common grazing land. As all were equal and active in church affairs, so were they likewise in the government of each tiny community.

Once a year, or oftener, the voters assembled in town meeting to discuss town affairs and to elect officers for the ensuing year. Here they levied taxes for the support of the community, provided for the upkeep of the roads, for the care of the poor, and the support of the church and schools.

The important part of this town government was the freedom with which all matters of public concern were discussed in the town meeting and the interest each citizen took in the affairs of the government. The town meeting was the means of educating every one in political affairs. The towns and townships were later grouped into counties, but there were very few county officers. Nearly all local questions were left to be managed by the people in their town meetings.

The County Government.—The men who settled Virginia and the Carolinas were not Puritans, nor did they come in families or groups of families from the same neighborhoods in England. Many were adventurers, often from the upper classes. In religion they were Episcopalians. They settled in a region where the Indian tribes were comparatively

peaceable, and there was little need for the people to settle near together for the purpose of defense. Since the climate was too hot for European labor, slaves were imported to cultivate the land. The rivers were numerous and navigable, and ships from England sailed up them to the landing of each planter. The soil was fertile, and the plantation owners soon became wealthy. Every plantation was the center of a group of free whites and an increasing number of slaves, all subject to the rich planters, whose houses lay miles apart from one another. The estates were large, and the people scattered thinly. There were no towns or villages as in New England, because there was no need for them.

The Southern colonists, in order to form local governments, had to include a wide territory, and so they copied the county governments in England. The counties were divided into parishes, which came to be sections just large enough to support a church. All important offices were those of the county, whose affairs were usually managed by a board of county commissioners. The county court administered justice, made laws regulating highways, and levied taxes for county purposes. The other chief officer was the county sheriff, who kept the peace and was also treasurer.

Differences in the Types. — Thus, we see, the mass of voters in the Southern colonies had little to say about their government, for they did not gather to take part in discussions as was the case in the New England town meeting. While the township form of government developed in New England, in the Southern colonies the county type prevailed. In the North the townships elected members to the colonial assembly, while in the South these were chosen by counties. The township form gave every one a practical education in

political affairs, while the county form developed strong leaders.

The Compromise Type. — The middle colonies had both the township and the county, and the powers of local government were more equally divided between them. In time this has become true of New England and the South, each copying somewhat from the other.

Types in the West. — As the Western states were settled, we find the people using the form of government that they were accustomed to in the East. The states of the central West received settlers both from New England and the South, and we find the power rather evenly divided between the township and the county. In the more Northern states, such as Michigan and Wisconsin, the township is more prominent; while in Ohio, Indiana, Kansas, and others bordering on the Southern states, the county government is strong.

QUESTIONS

1. How did the different forms of local government in America come about?
2. Describe the kind that developed in New England.
3. How was it suited to their needs?
4. Discuss town or township government as a means of political education.
5. How did conditions in early Virginia differ from those in New England?
6. Discuss this Southern type of local government.
7. What are the chief differences between these two types?
8. What is the compromise type?
9. Where found?

CHAPTER XXVI

COUNTY GOVERNMENT

The County. — For convenience to the people in ruling themselves a state is divided into smaller units called counties, each of which is made up of about a dozen or more townships. Many questions are settled by the people themselves in their town or county government. Among these are the questions of taxes, the building of roads and bridges, the schools, the arrest and care of criminals, and the care of the poor.

The County Seat. — The county seat is the village or city where the county officers meet to transact the business for the county. Here the courthouse, the jail, and the other county buildings are located, and here the county courts hold their sessions. Certain county officers reside at the county seat during their terms of office. The people of a county choose by vote which city shall be their county seat; and it cannot be changed to a different city except by another vote of the people.

County Officers and Administration. — County officers are usually elected by the people for various terms. The legislative power of the county is in the hands of a county board called commissioners, or supervisors. In the Southern group of states the commissioners are few in number, and each is elected by the entire county; while in the Northern group they are called supervisors and are chosen by towns, villages, or the wards of the city. The county board makes certain laws or rules for the county, and decides

upon the amount of money to be raised each year by taxation to maintain the county government and to contribute its share to the state. They also divide the county into school and road districts, look after the poor, erect public buildings, such as the courthouse and jail, construct bridges, and lay out public highways.

County Affairs and Administration.—The court affairs of the county are in the hands of a county judge, and with him is chosen a sheriff and a clerk of the courts. The sheriff keeps the peace by attending court and carrying out its orders. He has charge of the county jail, delivers prisoners to state institutions, sells property for the nonpayment of taxes, and turns the receipts over to the proper authorities. In some counties he is very well paid. The sheriff's fees in New York counties have been known in some places to run as high as \$75,000 a year.

In addition to these officers, there is a recorder of deeds who keeps certain records, especially a record of deeds and mortgages on property. These are necessary to show who is the rightful owner of a farm or home. There is a coroner who inquires into the cause of deaths, where violence or accident seems to have been the cause. The surveyor is the county map maker, keeping the records of the boundaries of farms and lots. Then there is a treasurer to keep the county funds paid in as taxes, and to pay them out when properly instructed. Every county has a lawyer, usually known as the county attorney, to look after the law matters of the county.

The Long-ballot System.—So many county officers are chosen by election that the voter cannot become informed about every candidate and vote as intelligently as he should. Certain districts of New York City have had tremendously long ballots, one 14 feet long and another 18

feet long, covered with the names of candidates in fine print. Under this system party leaders and bosses get in their work and unfit men are elected to office. The long ballot is an enemy of good government.

The Short-ballot Reform. — The best remedy for this is to introduce the short-ballot reform, which recommends the election by the people of only the most important county officers, the supervisors or commissioners. All the other county officials, instead of being elected by the people, are then appointed mainly by the commissioners. There is no good reason why the county clerk, the recorder, or the surveyor should not be appointed by the county board of supervisors. These officials merely perform the duties of their offices as stated by law. The sheriff could be better chosen by the court, whose orders he carries out. Since the county prosecuting attorney represents the state, he might well be appointed by the attorney-general of the state.

These appointed officers could be given longer terms, perhaps for life or during good behavior, and by doing away with such frequent changes the county would undoubtedly have better-trained servants and more satisfactory service. Then, too, the voters could easily investigate the record of a small number of candidates for the elective offices and make sure efficient men were chosen.

The first county in America to adopt the short-ballot system was Los Angeles County. Hitherto there had been thirteen different county officers to be elected annually, enough to cause the voters to ballot blindly. Under the new system, when it is in full operation, there will be only three candidates to be chosen for office yearly.

QUESTIONS

1. What is a county? 2. Why is it necessary? 3. What is the county seat? 4. How is it chosen? 5. Name the chief officers of the county. 6. Who makes certain laws for the county? 7. What are the sheriff's duties? 8. Name duties of other county officers? 9. What is meant by the long ballot? 10. What objection is there to it? 11. What is meant by the short ballot? Illustrate by Los Angeles County.

CHAPTER XXVII

STATE AND COUNTY PRISONS

Social Protection. — Society must be protected from the lawbreaker and criminal, or the government would soon go to pieces and we should have anarchy. Anarchy is a condition of society where each family or individual would have to fight to protect himself and his interests. Lawbreakers and criminals must be captured and taken care of; this is a part of the duty of the executive, or law-enforcing department of the state and county. The governor looks after state criminals and the sheriff takes charge of county lawbreakers.

The County Jails. — The people of each county, we have seen, elect a sheriff for a term of years and provide him with a home near the county jail. He is keeper of the jail, and sees that the prisoners who are awaiting trial are fed and cared for. When one has been convicted of a serious crime by the court, the sheriff takes him to the state prison, or the penitentiary.

In the county jails are found all sorts of men and even women. Some are young, having committed their first offense, and should be dealt with leniently; others are hardened criminals who have been many times in prison. In most states the keepers of county jails and city lockups have heretofore paid little attention to the welfare of their prisoners. The young and accidental lawbreaker was forced to associate with the hardened criminal, by whom

he was taught all sorts of crime, and began to look forward to a life of evil and disrespect for law. In many instances, if he had been protected from these dangerous companions, his first punishment might have made of him an honorable man.

The larger number of county jails are badly planned and are often unhealthful. Some are dark and cold in winter and poorly ventilated in summer. Prisoners frequently contract disease while confined in them. The quarters for the men are small and cramped, and sometimes two prisoners are crowded into one cell. Some jails have no separate quarters for the women prisoners. Such jails and prisons as we have just described have been schools of wickedness and crime, and have perhaps done more ill than good to society.

The sheriff has very seldom had experience in dealing with prisoners prior to his election, so he knows very little about the best way of managing them. He chooses his own deputy, or assistant, who may be no better qualified than himself for the office. County jails are much of the time empty, and at no time is the number of prisoners large. To keep a salaried official and provide him with a residence and a jail, which are naturally expensive buildings, is not a very economical way to care for a few prisoners, especially when they are poorly provided for.

The Remedy. — Men and women who have studied this question deeply believe that it would be far better in many ways to let the state officers take charge of all county prisoners, since it is state laws the prisoners have broken. If they were turned over to the state, one well-located prison might serve a dozen counties. In such a case a prison keeper, or warden, who had studied prison problems and received some training in the care of prisoners, could be

secured; and work could be provided for the prisoners as it cannot be now.

The Old State Prison. — The state penitentiaries were formerly no more satisfactory than the county jails. The criminals, young and old, were kept together in idleness. They were often harshly treated and beaten for disobedience. They were dressed in stripes and no attempt was made to reform and make law-abiding citizens of them. They were leased out as laborers to contractors, who paid the state so much for their work; and these contractors or their overseers often abused the broken men in order to get as much work out of them as possible.

Prison Reform. — In recent years a large number of thoughtful men and women have made a careful study of prisons and have come to believe in certain definite reforms or changes in the methods of caring for prisoners. Their plans have already been tried with success in Europe, and a number of American states are adopting them.

The first and chief object of imprisonment is to protect the public. This has always been the main object of prisons; but the new idea now growing is that it is just as important to try to reform and save the lawbreaker to a future life of honor and service to society. So most of the new plans now being tried are along the line of helping these erring men in a Christian spirit. A special effort is being made to get hold of the young criminal in the very beginning of his downward career, and to keep alive in him the spark of self-respect that will help him to save himself rather than to push him along by destroying his sense of manhood. The idea is growing that crime is not only to be punished, but cured.

In cases where young men and first offenders — who because of ill temper or drink have committed a crime —

are confined, they are being kept apart from the hardened criminals to prevent the teaching and influence that will encourage them to repeat their lawbreaking. There are criminals who have been sent to prison thirty times. They are not, needless to say, desirable company for weak and careless young men. By separating prisoners into classes much may be done towards reclaiming the young criminal.

Prison Discipline. — Prisoners must be ruled with a wise and firm hand, but it is found that they do not need to be as harshly treated as was formerly thought necessary. They are required to take baths once a week and change clothes regularly. They must rise at six o'clock, be ready for breakfast at seven, and retire at nine in the evening. These regular habits must be insisted upon for no other reason than to preserve health.

The Problem of Work. — No man, whether in prison or out, can long remain healthy and happy unless he has work to do. Every one who is worth consideration is willing to work if he has the opportunity. If the work is interesting and useful, he can lift his head in pride over a task well done. Not only do most men want to work, but the taxpayer who supports the prisons wishes to see the inmates self-supporting. If a prisoner is idle the taxpayer must pay his way.

The old and cruel practice of leasing out the prisoners to contractors is being abolished in most states, and it is a serious problem to find suitable work for so many men with little or no training. Sometimes the prisoners are put to work making useful articles like chairs and brooms. One might think this was the very thing for them to do and there could be no possible objection. But when the articles are put on the market they must often be sold at a lower price than those made by labor outside the prison



A Convict-built Road, Florida.

walls, and this lessens the price of the article and of labor outside. Free laborers naturally object to the public sale of prison-made goods for this reason, and they have a right to do so. To find work for prisoners that will not affect wages outside the prison is not an easy task.

Labor on Roads. — For a long time cities put their prisoners to work on the streets in chains. There was great objection to this because it was unpleasant to have a chain gang always before the public eye. The men are likely to be offensive in their speech with one another, and this is a bad influence.

These objections to chain gangs, however, do not hold so strongly in the country, where the population is sparse. Country roads in many sections are in a deplorable condition. Here prison labor does not affect free labor, since where the roads are not improved by convict labor they are very often not improved at all. At least this has been true in the past. Many of our Western states are now putting the prisoners to work building splendid macadamized roads, thus saving the state thousands of dollars and rendering the farms along them twice as valuable.

Manufactures for State Use. — By no means all the prisoners can be used on the roads, so some other labor for the state must be found. In most states the convicts are at work on various articles that are sold to other state institutions or to counties, cities, or towns. School desks and furniture are thus made in some states. There is little objection to this, since the goods are not put in open market to compete in a way that will lower the price of free labor.

Farm Produce. — In other states considerable farm produce is raised. The price of farm produce is fixed by world-wide conditions. The current price is therefore

not reduced by that put on the market through prison labor, since the amount of such produce is relatively small. Life in the open tends to improve the health of the convicts, and to benefit them in every way.

Industrial Training.—In many places prisoners are taught a trade and given some schooling, so that when they are at liberty they will be able to support themselves



Courtesy of Auburn Prison.

A Schoolroom in the Auburn (N.Y.) Prison.

in an honest way. It is a sad fact that many boys in prison have a better opportunity for industrial training than do those in our public schools. When possible, a variety of occupation should be provided in prison so that the prisoner can do that to which he is suited. Labor that is to his liking makes him cheerful and will do much to redeem his future and make him of service to the community.

Wages to Prisoners. — Every convict should be permitted to earn fair wages — that is, he should be credited a certain amount of money for his labor. A part of his wages may be taken to pay the running expenses of the prison, the salaries of the officers, and the cost of food, clothing, and lodging. The balance may be sent to his family, or, if he has none, it may be placed in the office bank to be given him when he is released. Nothing will help a man with a family so much as to feel that he is still contributing to their support; and that though he has fallen, he is still a husband and father with a chance of regaining his standing in the community where he lived. Often in our large cities when the father is sent to the workhouse, the family is without support and the mother is obliged to go out to work to keep her children from starvation. When there is no one at home to care for the children, they may drift into trouble and bad company, and very soon into crime. In many cases, if the state paid wages to prisoners, this misery could be prevented.

The Confidence System. — Some prisons are sending out squads of men to work on the public roads, without armed overseers, but merely upon their promises and their honor. It is amazing how few of these "trusties," as they are called, break their word. The confidence placed in them makes men of them. Of course not all prisoners can be depended on in this way, but it is surprising what the honor system will do for many, and how much honor there is still left among lawbreakers when it is brought out by proper treatment and the respect they have for noble prison wardens.

The Indeterminate Sentence. — In some states a great effort is being made to help criminals by not stating when they are sentenced how long they shall serve. The pres-

ent way is to send a man to prison for a definite term of one year, five years, or for life, and there has been slight chance of his being able to reduce that time. But the new idea is to make no time limit at the time of his sentence, but to allow him to work his way to liberty by good conduct while in prison. This indeterminate sentence creates hope instead of despair, and the convict is led to feel that his future is largely in his own hands. He has at least a fighting chance to regain some of the ground he has lost, and his self-respect is not totally destroyed.

Pardon Boards. — While in most states the governor exercises the pardoning power, he has so many duties that he cannot know of the merits of the prisoners. He is elected by one party, and if he is too lenient in granting pardons, he is accused by the opposing party of doing it to win votes. The better plan is to have a pardoning board, of which he is not even a member, appointed by the governor, to act as a court in granting pardons. In this way both justice and mercy can be shown the man who has gone wrong.

The After-prison Period. — In many states when a man has served his term in prison he is simply turned out into the world. This is his hardest time, because his residence in a prison is against him, and people refuse to trust him or to give him a chance to work. Having no money and no friends, he often turns to his old associates in crime and becomes a lawbreaker a second time. Since the state spends so much money to keep a man in prison in order to protect society from him, it can surely afford to do something after he is released to safeguard him so that he will not again become a state charge.

The best way to look after men when released from prison is the parole plan. A prisoner is set at liberty on trial.

So long as he reports regularly to the parole officer and lives an honest, industrious life, he is at liberty. If he breaks his promises, he is returned to prison.

A Modern Prison. — One of the most modern of the state prisons is that of Stillwater, Minn. The buildings are not of the expensive sort because they may need to be remodeled to meet the newer ideas that are put forth so frequently. They are well lighted and ventilated and in every way modern and thoroughly sanitary. The prisoners here are classified and each class has a separate institution. There is a manual training school for youthful prisoners, a reformatory, and a state prison. The prisoners are treated with much kindness in the hope of making good citizens of them. They are committed on the indeterminate sentence so that their term of punishment is largely in their own hands. They are all given work for which they are paid from ten to fifty cents a day and during their terms they have opportunity to learn several good trades.



Courtesy of Warden of Stillwater Prison.

Stillwater Prison, Minnesota. Known the World Over.

This institution is not a burden to the taxpayers of that state because it is self-supporting. It is even more than self-supporting as it makes a yearly profit above all expenses of some \$50,000. In this prison there are two industries, the binder twine factory and the farm machinery factory, both furnishing their products to the farmers of Minnesota at prices so attractive that there is great demand for them. These two industries furnish fine training for the prisoners and as there are no other twine or farm machinery industries in that state there is no one to offer objection. The success of the prison is largely due to an expert prison warden who is given a free hand in all matters.

QUESTIONS

1. Why are prisons needed? 2. What have been the chief evils of county jails? 3. Why should the sheriff be changed every few years? 4. Does not his experience make him better fitted for the place? 5. What advantages would there be in giving the state full charge of our prisoners that are now cared for by the county? 6. What objections may be given to the old-fashioned state prisons? 7. Give the two purposes of imprisonment. 8. Why should prisoners be classified? 9. Of what importance to prisoners is work? 10. What kind of work has been found suitable for convicts? 11. What difficulty in disposing of prison-made goods? 12. Why should wages be allowed prisoners? 13. Discuss the strong and weak points of the indeterminate sentence. 14. What are the difficulties of the after-prison period? 15. What is the parole system?

CHAPTER XXVIII

CHARITABLE INSTITUTIONS

Poor Relief. — The method of giving relief to the poor is carried out differently in the different states. In some states the work is done by the town or township governments. In the Southern states it is in the hands of the commissioners or other county officers. In many Western states both the township and county are interested. Some cities refuse to support paupers who have recently come to them; then the county must take them in charge, or, as in Massachusetts and New York, this duty falls upon the state. It matters little what part of our government assumes this burden, the state, the county, or the town, the problem is the same; and we are interested in the method.

Outdoor Relief. — There are two ways of looking after the poor. One, called outdoor relief, is the giving of aid at the homes of the needy. This is the best method where the family needs assistance only for the time being. It works well in country places where every family is well known. It is not so successful when the county or city has charge, because many pauper families impose upon the public by asking aid when they are able to care for themselves. These cases are now being watched and studied by visitors who make a careful investigation of each case before giving aid.

Indoor Relief. — Towns and counties frequently pay for the support of their poor in private houses, and able-bodied paupers are sometimes put to work. When the

number of paupers is large, it is necessary to provide almshouses or poorhouses belonging to the town or county, and here the paupers live continuously. Poorhouses should be established on farms, where the inmates may help take care of themselves by working at gardening, or by other labor, so as to make the institution at least partially self-supporting. Where such poorhouses are provided the number who apply for help is smaller; for many paupers



Courtesy of Department of Public Charities, New York.
Children's Garden, New York Children's Hospital.

will not work, and shun any home where labor is expected of them.

Homes for Children. — In the most careful state administrations the children who must have a home are not sent to the poorhouse because the association with many of the older and worthless paupers has a bad influence upon them. The state sometimes supports a school for dependent children where they may not only get an education, but

may learn some trade. From such schools the boys and girls are often taken into good homes and adopted. Often they grow up to be honored citizens.

Hospitals. — For the sick and injured there are provided hospitals where free medical assistance may be had. Such hospitals are usually maintained by cities, though sometimes by the county.

Asylums. — Many people who are unfortunate, such as the blind or feeble-minded or epileptic, cannot support themselves. The number of these in many counties and cities is too small to justify homes for them in every county, so the state has usually a great institution for each of the defective classes. We find state institutions for the blind, the deaf and dumb, and for the feeble-minded and the insane. The states providing homes for the epileptics are increasing in number. These state institutions are ruled by state boards usually appointed by the governor.

QUESTIONS

1. What two means are used in extending relief to the needy?
2. What is meant by outdoor relief? 3. By indoor relief? 4. When is each most helpful? 5. Discuss poorhouses. 6. What is now being done with dependent children? 7. For the sick? 8. For defectives?

CHAPTER XXIX

COMMISSIONERS AND COUNTRY ROADS

Why our Roads are Bad. — Except that which goes on in the schools, there is scarcely a more important work in any county than the building and care of its roads. European countries commonly have fine roads, because they are constructed by skilled engineers under government service. But most states in our country still have their roads in charge of county officers. These county officers, though they may be good business men, are not students of scientific road building. And no sooner does a commissioner or supervisor begin to learn some valuable lessons about roads than an election sweeps him out of office and puts a new and untrained man in his place. Consequently, although millions of dollars have been spent on American country roads, they are in the main a failure. The chief reason for our poor roads is not that we have refused to be taxed, but that we have not learned the important lesson of getting men who are experts in road building as commissioners and keeping them in office.

Importance of Good Roads. — Well-made highways enable farmers to save much time in marketing produce, and "time is money." Easy travel also saves the energy of the horse; this means economy of feed. If the roads are in order, the farmer can use his team when the field work cannot be done; and this reduces the idle time of the horses. If travel is easy, the farmer will go to market oftener, selling many odds and ends of farm produce that



Bad Roads are Costly to the Farmer.

otherwise might be left to go to waste because of the time it would take to dispose of it to advantage. For these and other reasons a fine public road makes the farms along the way more valuable.

Aside from the money gain to the farmer, good roads encourage his family to move about more and to enjoy themselves socially. They gain a great deal by contact with their neighbors. They go oftener to church, to other social events, to lectures, and to the city.

The older children may go farther to school if the roads will permit. Consolidated schools are thus made possible, and pupils may be transported at public expense some distance to the larger centralized schools, which have so many advantages over the one-room country schools. More expert teachers may be had, a trained superintendent can be employed; the children are better graded and the larger classes create more enthusiasm in study and recitation. Centralized schools, besides being better equipped

in every way, may be more economically managed in one building, which requires only one heating system and one janitor. And all this is possible only when the roads are kept in good condition.

City people also demand good country roads, because the better the roads, the more easily they obtain country produce and the cheaper it is. City people are using the country roads more every year for pleasure driving and for the automobiles. It is said that automobiles, because of the high rate of speed at which they go, do more toward wearing out the roads than all the heavy teaming of the farmers. The suction of the swift-moving wheels picks up all the finer particles and scatters dust far and wide. Because of the ravage done by the city automobiles, it is unjust to expect the farmers to build and keep the roads in repair. Moreover, the cost of the produce that the farmer takes to market is of as much concern to the people in the city who consume it, as it is to the man who has it to sell.

More than two hundred and fifty million tons of freight are hauled from farms to the market or railroad stations each year. Counting the labor of men and of horses, the wear and tear of vehicles and harness, it costs, on an average, about twenty-three cents to move each one of these millions of tons a mile. Railroads haul a ton of freight for long distances for less than a cent a mile. The farmer's distance to market averages nine miles, and so the cost of hauling a ton of farm produce to market averages two dollars and nine cents. Better roads would permit larger loads to be hauled in the same time, and lighter loads in much less time.

The First Expert Road Builders. — The Romans were the first to solve the problem of how to build good high-

ways. The central government at Rome built all the roads and kept them up. They were made of stone by trained experts, and in so solid a manner that, though the surface has required repair from time to time, the stone foundations are as good to-day as when they were built two thousand



The Cumberland Road.

years ago. They will be serviceable for centuries yet to come.

Our Early Roads. — The earliest American roads were built in Virginia, and led from the plantations to the landings on the rivers. These were simply mud roads built by the plantation owners. Hogsheads of tobacco were fitted with a pair of shafts for a horse and were thus rolled along these roads to the river landings by horse power.

Supplies for the plantations were hauled homeward in rude carts.

Save the Cumberland Road, our national government has done very little road building. The task of constructing good highways through rough and hilly sections has been poorly done and at great expense. There are many people who think our national government will again enter the field of building good wagon roads. In the early days many long roads were made and paid for by private parties. These parties then made every one who wished to use them pay a toll. There are now but few toll roads.

The Road Tax. — There are two methods of paying road taxes practiced in different parts of our land. One way is for the farmer to take his team and work on the road long enough to pay for the tax levied against him. This method is a failure, for the farmers seldom know how to build good roads. They care very little how they work so long as they put in their time and get back to their crops.

The other method is much more satisfactory. It is this: Each farmer pays his road tax in cash, and the money is used to employ men who are practiced in road building. Sometimes a man is employed the year round to prevent the roads from getting out of repair. "A stitch in time saves nine," and so it is with a shovelful of gravel. A man and a horse and cart kept busy at the gravel pit all the year through are worth many times more in securing good roads than all the "working out" of taxes.

The State's Part. — Many people are now coming to see that the state ought to keep up as well as build at least the main roads. This will insure the employment of road engineers, and it will be done in a permanent manner. In many states the cost of road building is not all saddled upon the township or county. A just method is to require



Courtesy of Warner-Quinlan Asphalt Co.

An Asphalt Road, New York State.

the people of the locality who use the particular road to pay one third of the cost of its building, the county one third, and the state one third. In other states, the main through roads leading from county to county are receiving more attention from the state; while cross roads, which have only local use and travel, are left to the people of the locality. Most states now have a department of highways with a trained road expert in charge.

Drainage and Grading. — It is useless to build a road without first providing a dry roadbed. Standing water and the grinding of wagon wheels will soon reduce any road to a quagmire. The first step towards making permanent roads is to provide permanent drainage by ditching and tiling where it is necessary.

Next in importance to drainage comes grading. The narrower the roadbed, the easier it is to keep in order, because water will not so readily collect in it, but roads must

be wide enough for teams to pass. The surface should be slightly rounded to shed water quickly, and the ruts must be filled as quickly as they appear. Here is where the caretaker gets in his best work by preventing deep ruts from forming and thus keeping the roadbed dry.

Surfacing Roads. — After drainage and grading comes the surfacing of the road. On a clay road a fairly hard and inexpensive surface may be made by thoroughly mixing gravel with the clay. This packs well and makes a hard surface, so if the mixture is of sufficient thickness, the road will bear heavy traffic.

Sand roads may be greatly improved by surfacing with clay. Sand mixed with clay does not make so firm a roadbed as do gravel and clay, but it makes a fairly good surface.

There are tens of thousands of miles of loam roads in the central West, and these roads are almost bottomless in bad weather. Loam takes water like a sponge, and on such roads it is not an uncommon sight to see an empty wagon mired and abandoned. Farmers are told not to work their fields when it is wet, because it will harden them and they will bake afterwards. This is the very reason why loam roads should have the surface stirred when wet. Such working is called puddling. It brings the soil grains in closer contact, making a harder surface than before.

The tool most useful for puddling is the split-log drag. The halves of the log are held on edge a few feet apart by rounds inserted like the rounds of a ladder. This drag used on muddy roads will smear or puddle the surface, making it tough and hard. By lengthening one chain and allowing the inner end of the drag to lag behind as it is drawn along, it fills up the ruts and works all loose material towards the middle of the road. This gives the surface a rounded shape for good drainage.

This drag is very useful on dry roads, also. By riding on the outer or ditch-end of the drag and driving once on either side of the road, the ruts are filled and the center made higher. There should be a law requiring all heavy hauling to be done with wide-tire wagons only. Wide tires pack and harden the road like a roller, whereas narrow tires cut and injure the road surface.

Different kinds of materials are used in surfacing roads. When suitable gravel can be found it will make an excellent road. In communities near the coast, shells from the sea are often used to surface roads, with satisfactory results.

Probably the most popular material for surfacing is broken stone. Stone-bedded roads are said to be macadamized, because a Scotch engineer named Macadam was the first to use and urge this kind of road.

The old Roman roads were surfaced with stone, which was often several feet thick and thus very expensive. Macadam believed that a smaller amount of stone could be made to serve just as well, and he urged that it would cost much less. The world has come to see the correctness of his ideas, and now macadamized roads are found everywhere.

The Building of Macadam Roads. — In order to build a macadam road the roadbed is first given the slope desired so the water will quickly flow to the side gutters. After this, the bed is rolled hard with a heavy roller; then it is covered with a layer of coarse stone and rolled again. Then another layer of finer crushed rock is spread on top and rolled until it works in between the pieces of the coarser stone. A layer of still finer crushed stone or sand is spread next on the surface and sprinkled with water, after which it is rolled until a smooth, hard surface is formed. Such roads are from six to twelve inches thick. They cost from



Building Permanent County Roads.

three thousand to six thousand dollars per mile, but intelligent farmers realize that such tax money is well invested.

Brick Roads. — It is said that the best road material to resist the wear of automobiles is brick. Brick pavements cost considerably more than the macadamized road, but they are more satisfactory in many ways. They last longer, they require less repair, and they are not so dusty. In many places, as in Cleveland, Ohio, the brick pavements are being extended from the city limits to the county line, where the adjoining counties are planning to take up the work and extend the roads to other cities.

Concrete Roads. — Another kind of road coming into favor is the concrete road. States like Wisconsin, Ohio, and others are building these hard concrete roads. It is perhaps rather early to judge of the wearing quality and the general satisfaction given by these thoroughfares, but many people believe in them. Care must be taken to allow for the expansion of concrete roads in warm weather.

Expansion joints must be provided at frequent intervals to prevent the roads from bulging up under the summer sun as concrete sidewalks sometimes do when not properly laid.

The Draft Dependent on the Road.—How much a team can pull depends upon the firmness and smoothness of the roadbed and upon the grade. A load that three horses can just pull on level, hard asphalt would require seven horses on smooth block pavement, fourteen horses on cobblestone, forty horses on an ordinary country road of earth, and eighty on a sandy road.

The grade is also important. It has been found that if a horse can just pull a thousand pounds on a level road, he can draw only nine hundred pounds up a one per cent grade, eight hundred pounds up a two per cent grade, four hundred pounds up a five per cent grade, and only two hundred fifty pounds up a ten per cent grade. A one per cent grade is one that rises one foot in each one hundred feet of distance, a two per cent grade is one that rises two feet for each hundred feet, and so on. It is therefore much better, under most circumstances, to build the road around a hill than over it.

QUESTIONS

1. Discuss the commissioner's duty in caring for roads. 2. In what ways do good roads assist the farmer? 3. What effect have roads on schools and schooling? 4. Why are city people interested in country roads? 5. In what ways are road taxes commonly paid? 6. Which is the better way and why? 7. Suggest a fair way of paying for roads. 8. How does the macadam road differ from the Roman roads? 9. What is an inexpensive way to surface a clay road? A sandy road? A loam road? 10. What can you say of the split-log drag? 11. Discuss brick roads. 12. What can be said in favor of concrete roads?

CHAPTER XXX

STATE GOVERNMENT

Written Charters. — Prior to the Revolution, the American colonies ruled themselves under charters granted by the English Parliament. These charters were written documents outlining the kind of government the colonies must have, but granting them some freedom in certain affairs. After the Revolution the colonies became states, and as they were familiar with written charters, they continued to want a definite outline, or framework of government. Thus they adopted state constitutions.

State Constitutions. — The constitution of a state is its supreme law so far as state authority goes. All laws passed by the state legislatures must square themselves with the state constitution; and if a law that violates the constitution passes the legislature, it may be brought before a court in a case, and the court will pronounce it null and void, of no effect.

Lawmaking. — State constitutions place all lawmaking powers in the hands of a legislature, the members of which are chosen by the people, usually for a term of two years. The legislature has two parts or sections, generally called houses; one, the senate or upper house; and the other, the assembly or lower house. The idea of two houses was copied from some of the colonies or from the English Parliament.

There is a reason for having two houses, because they serve to check each other in unwise acts. People are

urging laws about all sorts of things, and in many cases these proposed laws would do more harm than good. Therefore it is well to have a law thoroughly considered before it is saddled upon the people.

A bill passed by one house may be thrown out by the other, or, if it passes both, it may be vetoed by the governor. In case of a veto it must again pass both houses with a higher majority, usually two thirds, in order to become a law without the governor's consent.

A member of one of the houses introduces a bill. It is put in the hands of the clerk, who reads the bill either in full or by title, after which it is referred to the committee having the matter with which the bill is concerned in charge. After this committee has considered it, they may not deem it worthy to be reported back to the house, in which case the bill is said to have been "killed in committee." But if the committee thinks best to bring back a report on the bill, it is read a second, and then a third time, and debated and amended. Finally, it is voted upon, and if a majority vote in its favor, it is signed by the presiding officer and sent to the other house. Here it again goes through the process of three readings on three separate days, with debate and possible amendment, and is brought to a vote. If it receives a favorable majority in the second house, it then goes to the governor. The governor has from ten to thirty days to decide whether or not he will sign it. If he is opposed to it, he returns it to the house in which it originated, stating his objections. This is called the governor's veto. The legislatures of most states may yet pass the bill by a two-thirds vote in its favor in each house. In this case the bill is passed over the governor's veto and becomes a law.

Local Lawmaking.—The state legislatures do not

make all our laws. For local affairs, it seems best to keep the government as close to the people as possible. So the legislature gives certain powers of lawmaking and law enforcement to school districts, villages, towns, cities, and counties. The city council, the county commissioners, and the school board are legislative or lawmaking bodies, who make laws or ordinances within certain limits.

Enforcing State Laws. — The state constitutions place the executive power, that is, the power to enforce the state laws, in the hands of a governor, secretary of state, attorney-general, treasurer, and other officers, chief of whom is the governor.

The governor reports to the legislature upon the condition of the state and recommends that certain laws be passed. When there is need of quick action, he sometimes calls the legislature into extra session, or meeting. In nearly every state the governor must pass upon bills passed by the legislature before they become a law. He may pardon or lessen the punishment of criminals. But the governor's chief duty is to see that the laws are obeyed. He is commander in chief of the state militia, which obeys him as the police do the mayor. Each locality, city, and county also has executive officers that are responsible for most of the enforcement of laws.

The secretary of state keeps the public records, such as the acts of the legislature; the attorney-general gives legal advice to state officers and is the lawyer for the state; the state treasurer has charge of all money affairs. Other state officers have minor duties.

State Courts. — In each state there is a complete system of courts for explaining the meaning of the laws and for deciding cases of dispute brought before them. At the head of all is the supreme court that acts for the entire

state and hears cases carried up from lower courts. When a lower court decides a case at law, if either party is dissatisfied with the decision, he may appeal it, that is, carry it to a higher court which he hopes may decide differently. Such cases are often appealed to the state supreme court, whose decision is usually final.

The Judges. — It is very important that the judges of our courts should be able and upright men. A corrupt judge may use the great power conferred on him in favor of certain parties or corporations which in return give him bribes or help to keep him in office. An honest judge who is ignorant of facts may also do much harm, and so different states have tried various ways to secure the ablest judges. In some states the judges are elected by the people for short terms. This is a bad plan for two reasons: because the people sometimes choose men unfitted for the work, and because the really great or able lawyers can earn so much more in private practice that few are self-sacrificing enough to accept a judgeship for a short term. Moreover, a judge no sooner becomes acquainted with the elements of his office when he must go before the people again for reelection. A competent judge ought to be kept in office for life, or during good behavior. The governor has ways of determining what lawyers have the qualities of a judge much better than the voters. Thus the states where judges are appointed by the governor for a long term of years usually get the best and ablest men on the bench.

QUESTIONS

1. What are written charters?
2. What is a state constitution?
3. What happens when a law is made that is contrary to the constitution?
4. What body makes the laws for a state?
5. Why were two houses thought necessary?
6. How are laws made?
7. What part does the governor usually have in making laws?
8. Do the state

legislatures make all the laws that the people of the state must obey? 9. Who enforces obedience to state laws? 10. Give some other powers of this executive. 11. Name some other state officers. 12. What is the purpose of the state courts? 13. How are judges usually chosen? 14. Why is the governor usually better fitted to choose a judge than are the voters?

CHAPTER XXXI

THE VOTERS

Representative Government. — Ours is a country ruled by the people. But the country is so large, and the people so busy earning a living for their families that they cannot all get together to make laws and judge disputes, so they send men to represent them in carrying on the government. We call these men representatives; and a government of this sort, a representative government.

Citizens Who Vote. — Not all the people, nor even all the citizens, may have a share in the election of these representatives and other officials or in the work of the government. Children, for instance, are citizens if they are born in this country or if their parents have become naturalized, yet it would be absurd to allow children to vote. To vote intelligently a person must have some knowledge of political affairs and some experience in life and in dealing with men. Heretofore, for these reasons, only men have been allowed to vote, as they have owned most of the property and transacted most of the business of the country.

Manhood Suffrage. — We have to-day in the greater number of states what is called manhood suffrage, that is, practically all men of voting age have the right to use the ballot. This has not always been the case in our country. In early days no man was allowed to take part in the elections unless he owned real estate, for it was thought unsafe to permit men who paid no taxes to share in the choosing of officers and the voting of taxes upon the people. Grad-

ually the states have done away with the property-owning qualification by changing the state laws so that most male citizens may now vote.

The Legal Age. — The age limit in all the states for voting is twenty-one years, and no one younger is allowed to vote. Every voter must have been, for a short time, a resident of the district in which he votes, and he must have lived in the state a longer period, usually one year. In most states only citizens, native born or naturalized, may vote; but there are several states that permit foreigners who have announced their intention of becoming citizens to vote.

The Fifteenth Amendment. — At the close of the Civil War the United States adopted the Fifteenth Amendment to the Constitution so as to give the negroes the right to vote. Since that time, many of the Southern states have passed laws to exclude the most ignorant blacks and whites, because these ignorant people are not sufficiently well informed to vote wisely. The Fifteenth Amendment forbids states to deny the right to vote on the basis of "race, color, or previous condition of servitude," but there is nothing to hinder any state from excluding people from voting for such reasons as inability to read and write or on the basis of age or not holding property.

Woman's Suffrage. — In a large and growing number of states women have the same voting privileges as men. They vote for all state and local officers and for presidential electors and representatives to Congress. In a few other states women may vote only at city elections for city officers, and, in more than twenty states, they have a share in choosing school officers. Sentiment seems to be growing in favor of complete woman's suffrage in all the states. Where they already have this right they have used it fully as well as men, and in a few cases the women have defeated

unworthy "machine" candidates who would otherwise have been elected. In a referendum election the women of Seattle succeeded in ousting an undesirable mayor and in defeating him when he again came up for reelection.

The Excluded. — Not only are children excluded from voting everywhere and women in most states, but several classes of men are debarred from the franchise. Persons who are insane or feeble-minded are universally excluded from voting, as are also male criminals who have not received pardon for their crimes. Paupers who are taken care of in public institutions are frequently denied the voting privilege. In a few states no one is allowed to vote who cannot read and write. This is true of nearly all of the Southern states. In this way they have shut out the majority of negroes, who in some states outnumber the whites.

QUESTIONS

1. What is meant by a representative government? 2. Who are allowed to vote in your state? 3. Discuss the right to vote in the early days of our government. 4. What is the Fifteenth Amendment? 5. What is the legal voting age? 6. Discuss the progress of woman's suffrage. 7. Does your state provide for it? 8. Arrange a class debate on the subject. 9. What classes of men are excluded from voting?

CHAPTER XXXII

ELECTIONS

Electing Public Officers. — When voters go to the polls to cast their ballots they vote for those who have been previously nominated for office. These nominations are made several weeks before the election, usually in conventions held by each political party or at a primary. The time between the conventions or primary and the election day is used by the nominees or candidates and their party friends to carry on a vigorous campaign to win votes for their ticket. Sometimes there are processions, speeches, and other exciting demonstrations during the campaign. Money is collected and plans are made to get the men who usually stay at home and forget to vote, to the polls on election day.

A Nominating Convention. — If we were to attend a county nominating convention, we should find, besides hundreds of spectators, a very excited gathering of several hundred delegates who have been sent by the various precincts and towns to name candidates for the party ticket. The convention is called to order by a chairman chosen to preside. Nominations are made for one office at a time. The candidate who gets a majority of the votes of the delegates is declared to be the party nominee for the particular office, and his name is placed on the ticket.

Sometimes there have been corrupt methods used in the convention to secure the nomination. Votes of some of the delegates have been bought, and if the parties are un-

equal in strength in a particular county, a nomination is apt to mean certain election. Therefore unscrupulous politicians have sometimes tried to control the party nominating conventions. Such instances of corruption in conventions has led the people in many states to demand a better way of choosing their candidates.

Direct Nominations. — This new method of selecting party candidates is called direct primaries. All the party men hold an election called a primary at the regular voting places. The man who gets the largest number of votes for each office respectively in this direct primary is the nominee of the party for that particular office. Other parties choose their candidates in the same way, at the same time, and in this direct manner. This method offers less opportunity for bribery and corruption in elections. It also takes away power from the party "bosses" and political "machines," and gives it to the voters of the party.

The Australian Ballot. — In former days men bought votes on election day and marched the men at once to the ballot box to make sure they kept their promise. It was almost impossible in those times for a man to deceive any one as to how he voted. Many evils sprang from this lack of secrecy in voting. Besides the money bribe, men were known to lose their positions if they did not vote as their employers wished them to, and it was impossible to conceal from the men standing by which ballot they cast. To improve these conditions, most states have now adopted a method of balloting in secret, called the Australian ballot system, because it is copied from Australia. The names of all the candidates of every party are put on the same ballot, a column of names for each party. The voter takes this ballot and goes to a private booth, where he may mark it unobserved. He places a cross before the name of each

candidate for whom he votes. Then, folding his ballot, he sees it deposited in the box. No one need know how he voted unless he wishes to make it known. The secrecy of the Australian ballot has aided greatly in purifying elections.

False Representation. — Lincoln said our government was a government of the people, by the people, and for the people, but there has been much dissatisfaction with the manner in which the representatives do the people's work. After a man has been placed in office, he may break every promise he made before the election, and it has been difficult for the people to punish him, until he came up for reelection. Meantime, perhaps, he has done many things that were contrary to the people's wishes, and left undone much that they elected him to do.

The Referendum. — So there has been put into practice in several states methods of holding the officers more nearly in line with the wishes of the people. Certain states have adopted the Initiative and Referendum. The Referendum requires, under certain conditions, bills passed by the legislative body to be submitted to the people at an election before they may become a law. This enables the people to veto, or vote down, measures that are not to their liking.

The Initiative. — When the people desire a law that their legislature refuses to pass, the bill may be framed and submitted to the people, and if they vote to adopt it, it may become a law without the approval of the legislature. This is known as the Initiative.

The Recall. — Still another weapon the people of some states have come to wield in order to force their officers to do their bidding. This is known as the Recall. An officer who has violated his trust or broken his promise to the

public may be recalled, or dismissed, by a vote of the people. Such laws as the Initiative, Referendum, and the Recall force officers, lawmakers, and other public servants to regard the people's rights and wishes.

Long and Short Ballots. — Another difficulty has been met in the rapid growth of our country. More and more officers are needed, and so many names have been gradually added to the ballot that the number confuses the voter. There have been as many as twenty-five to fifty different offices to be filled at one election, and the voter is handed a ballot several feet long with several hundred names on it. It is impossible for him to know very many of the candidates, or to make himself familiar with their merits. So he must cast his ballot blindly, accepting the advice of the newspapers, which may be more or less biased, or vote a "straight ticket." This is just what the politicians of the "machine" wish him to do. It has been easy for them by controlling the nominations to secure their men in this manner regardless of fitness, while the voter is powerless to select the unfit men from those that are honest and competent.

In order to overcome this hindrance to good government, the short ballot has been devised. Under this plan only the most important officers, few in number, are elected by the people. These candidates the people can become acquainted with, their merits can be known. Consequently, better men are chosen to office. All the lesser offices are filled through appointment by the elected officers, who may in this manner be held responsible to the people.

Voting Machines. — The work of counting the ballots after election day, especially when long ballots are used, is very heavy and very expensive. It requires many hours, and the complete election returns are often delayed for several days, largely on this account. Meantime the people

The Commonwealth of Massachusetts

List of Candidates nominated, to be voted for in the Town of Amherst, Nov. 8, 1910.

SPECIMEN BALLOT.

Wm M. Olin
Mayor of the Town

Penalty for wilfully defacing, tearing down, removing or destroying a list of candidates or specimen ballot—
fine not exceeding one hundred dollars.

To vote for a Person, mark a Cross X in the Square at the right of the Party Name, or Political Designation. ☒	To vote for a Person, mark a Cross X in the Square at the right of the Party Name, or Political Designation. ☒
GOVERNOR Mark ONE	CONGRESSMAN —Second District..... Mark ONE
EREN G. DRAPER—of Boston..... Republican	ALVA E. TUNTON—of Springfield..... Socialist
EUGENE W. FORD—of Boston..... Democratic	FREDERICK H. GILLET—of Springfield..... Republican
EUGENE W. FORD—of Springfield..... Democratic Progressive Nom. Paper	WILLIAM G. McKECHNIE—of Springfield..... Democratic
JOHN A. WICKHILL—of Boston..... Prohibition	
MORRIS E. RYHER—of Boston..... Socialist Labor	
DANIEL A. WHITE—of Boston..... Socialist	
LIEUTENANT GOVERNOR Mark ONE	COUNCILLOR —Eighteenth District..... Mark ONE
THOMAS F. CASIDY—of Boston..... Democratic Independent Nom. Paper	EDWARD A. ROCKLAND—of Springfield..... Socialist
LOUIS A. FROTHINGHAM—of Boston..... Republican	JOSEPH B. SLY—of Springfield..... Democratic
HENRY C. HESS—of Boston..... Socialist Labor	ABRAHAM H. GUESTING—of Springfield..... Republican
PATRICK MAHONEY—of Boston..... Socialist	
WILLIAM G. WICKHILL—of Boston..... Prohibition	
SECRETARY Mark ONE	SENATOR —Twentieth and Nineteenth Districts..... Mark ONE
HARVEY DUBOIS—of Boston..... Socialist	CHARLES P. ALDRICH—of Springfield..... Democratic
CHARLES J. MARYELL—of Boston..... Democratic	FRANK C. BUTTAY—of Springfield..... Socialist
ANDREW MORTENSON—of Boston..... Socialist Labor	JOHN H. SCHONWALTER—of Springfield..... Republican
WILLIAM M. OLIN—of Boston..... Republican	
WILLIAM E. THOMAS—of Boston..... Prohibition	
TREASURER Mark ONE	REPRESENTATIVE IN GENERAL COURT Mark ONE
CARL FREDERICKSON—of Springfield..... Socialist Labor	Third Representative District
THOMAS A. FRANKEL—of Springfield..... Prohibition	JOHN J. BETHOLD—of Boston..... Democratic
SILVERSTEIN J. WAGGON—of Springfield..... Socialist	HARRY L. HOWARD—of Boston..... Republican
BENJAMIN F. PEACH—of Springfield..... Democratic	
CLARENCE A. STEVENS—of Springfield..... Republican	
AUDITOR Mark ONE	COUNTY COMMISSIONER —Republican..... Mark ONE
JOHN HOLY—of Springfield..... Prohibition	EUGENE E. DAVIS—of Springfield..... Republican
TERENCE P. McNALLY—of Springfield..... Socialist Labor	HENRY W. WARNER—of Springfield..... Democratic
ANDREW WILKS—of Springfield..... Socialist	
CHARLES C. PLAIN—of Springfield..... Democratic	
HENRY E. TURNER—of Boston..... Republican	
ATTORNEY-GENERAL Mark ONE	ASSOCIATE COMMISSIONERS —Republican..... Mark TWO.
EDWARD MCGOWAN—of New Bedford..... Socialist Labor	WARD A. HARLOW—of Springfield..... Democratic
HAROLD MCKEALP—of New Bedford..... Socialist	MYRON H. JUDD—of New Bedford..... Democratic
JOHN B. RAYMOND—of Springfield..... Democratic	EUGENE H. LYMAN—of New Bedford..... Republican
JAMES M. JUDY—of New Bedford..... Republican	EDWARD D. STONE—of Springfield..... Republican
	DISTRICT ATTORNEY —Nineteenth District..... Mark ONE
	WILLIAM A. DAVENPORT—of Springfield..... Democratic
	RICHARD W. IRWIN—of Springfield..... Republican
	SHERIFF —Representative County..... Mark ONE
	GEORGE B. ROCKNOR—of Springfield..... Republican
	MATTHEW FITZGERALD—of Springfield..... Democratic

Massachusetts Ballot.

and particularly the candidates are waiting with anxiety to know the results. For these and other reasons, voting machines have been invented that will give the result of an



A Sample Voting Machine.

election immediately at the close of the polls, saving great expense and labor as well as days of suspense.

Patriotism To-day. — While corruption and mismanagement have grown in many departments of our state, city, and county offices, new means are being devised daily to check the evils and bring good government near to the people and more nearly under their control — always pro-

viding that the honest and intelligent citizens of our country do their part by voting.

Strange as it may seem, it has usually been more difficult to get the intelligent citizens and the leading business men to the polls than it is to get the ignorant and undesirable ones. Herein lies the real danger to a government by the people. The intelligence and judgment of our wisest and keenest men are necessary to a clean, sane, honest, and effective administration of affairs; but we will not have this sort of man in office unless men who are equally honest and wise work for his election in the campaign, and vote for him on election day. No citizen who is careless or indifferent about going to the polls on election day can be regarded as truly patriotic.

The old notion of patriotism was that if a man was willing to fight for his flag in case of war, he was a patriot and a lover of his country. To-day we consider a man a patriot if he fights for his community and the welfare of his neighbors in days of peace. We rank no one as an ideal citizen unless he thoughtfully strives for what is best for all the people. It is not only voting on election day, it is a question of giving time and hard work to public affairs.

QUESTIONS

1. How are candidates usually nominated for office?
2. What is the difference between nominating a candidate and electing him?
3. Describe a nominating convention.
4. What objections have been given to the nominating convention?
5. What is meant by direct nominations?
6. In what way is this better than the old method?
7. Describe the Australian ballot system.
8. What is the Referendum?
9. What is meant by the Initiative?
10. What by the Recall?
11. Discuss the long ballot and its weaknesses.
12. How are these corrected by the short ballot?
13. Why are voting machines being used?
14. Is a voter's duty merely to vote?
15. What is a fuller meaning of patriotism?

PART III: THE NATION

CHAPTER XXXIII

THE CENTRAL GOVERNMENT

Government during the Revolution. — The thirteen American colonies went through the Revolutionary War with no central government of consequence. They had a Continental Congress that was made up of delegates from the various colonies, but there was no law giving power to this body. The colonies got along together and fought through the war without quarreling simply because this was the only way to win freedom from King George the Third.

In the midst of the war (1777) a form of union, or central government, called the Articles of Confederation, was made and sent around to the different states to be adopted; but it was not until the war was almost over (1781) that all the colonies had decided to unite under a central government.

The Weak Confederation. — The people of America had come to hate the idea of a king, for they felt that King George had been a tyrant. What they wanted was a form of government by the people wherein they could be their own rulers. They were so fearful of giving their own central government any power over them that the Articles they set up for themselves were very weak indeed.

They had created a Congress to make laws for the new union, or confederation, as it was called. But after the laws were made there was no executive, such as a president,

to enforce them. Neither did the Articles provide for a court of judges to explain and apply the laws when Congress had made them. Since there was no power to force the states to obey the union laws, the states continued to do as they pleased. When Congress asked for money to pay debts contracted during the war, many states ignored the call. Consequently the people came to have very little respect for the central government, and the best men would not accept the office of Congressman. Since the states had all the power, they even grew careless about sending representatives to Congress. This brought out another weakness of the general government, for in this Congress each state had one vote, no matter how many representatives it sent; and no law could be passed without the vote of nearly all the states. So if several states neglected to send representatives, no laws whatever could be passed by Congress.

The control of commerce and taxes, even, was left to the states acting separately. Naturally, in time the states became jealous of one another and began to quarrel among themselves. They made laws taxing goods that came across the border from other states. The farmers of Connecticut, for instance, could not send firewood down to New York City without paying a tariff on it. Some states began to make "spite" laws. Each one had a different tariff on the goods from foreign countries, and everything was in confusion. With no money, and no power to collect any, and with no power to enforce national laws, Congress was helpless, and the country was drifting into anarchy. European countries believed the states could not long rule themselves, since they were on the point of fighting, and England and France were waiting for the time when they should again come and take possession of the American states.

This period of danger in our history from 1783 to 1788 has been called "the critical period," for the states came perilously near losing all they had gained by six long years of war. All this happened because each state was anxious to keep all the powers of government, making the confederated or central government only a weakling.

The Constitutional Convention. — But our great leaders saw the danger. Washington, Franklin, Hamilton, Madison, and other leaders determined to save the country from breaking up into thirteen separate nations. Maryland and Virginia had been having frequent disputes concerning the navigation of the Potomac River and of Chesapeake Bay. This dispute led to the calling of several meetings to which different states were invited to send delegates. One of these meetings was held in Annapolis in 1786, but little was done except that Alexander Hamilton proposed that a general convention, representing all the states, should be called to meet in Philadelphia for the purpose of amending the Articles of Confederation.

This great Convention at Independence Hall in Philadelphia met in 1787, and Washington was unanimously chosen president of the Convention. Among the noted men present were Franklin, Madison, Roger Sherman, Eldridge Gerry, Robert Morris, Hamilton, and many others among the great statesmen of America. The Convention soon decided that it was not worth while to try to patch up the old Articles of Confederation, and it was boldly proposed to form a new and strong central, or federal government — a government with power enough to command respect both at home and abroad.

Problems before the Convention. — There were many differences of opinion and not a few warm debates as to the kind of government needed; but the strong influence

of Washington and of Franklin held the men together until they found ways to compromise their difficulties.

Representation in Congress. — The Convention soon decided that Congress should be composed of two houses, but when it came to fix upon the number of men to be sent by each state to make up these houses, a loud disagreement arose. The large states insisted that the number to be sent from each state should vary according to the population, that is, if one state had twice the population of another, it should have twice as many representatives, or members, in Congress.

The smaller states objected strongly to this notion, saying that it would place the smaller states in subjection to the larger ones. In 1790 the four largest states had 32 representatives, while the other nine had between them only 33. The small states declared that each state should have an equal vote, regardless of size. It was evident that unless this was done Virginia, Massachusetts, and Pennsylvania would have almost as many votes in Congress as the other ten states combined. For weeks this debate continued, almost to the point of splitting the Convention.

At last the delegates from Connecticut suggested a compromise. In the lower house, to be called the House of Representatives, each state was to be represented according to its population; but in the upper house, or Senate, each state should have two senators. The Connecticut compromise satisfied the states of lesser population, and was finally adopted.

The Three-fifths Compromise. — The next difficulty arose over whether or not slaves should be counted in determining the population that decided the number of representatives a state should have. The South wished to count the slaves so as to increase its number of representatives;

but the delegates from the North objected, saying that since the slaves were looked upon as property with no voice in the government in the Southern states, they should not be counted for representation in Congress. After much serious debate another compromise was suggested, known as the three-fifths compromise. Five slaves were to be counted as equal to three free persons in determining representation in Congress, and also in levying any direct tax that Congress should see fit to lay upon the states. Since Congress has levied a tax directly upon the people only two or three times since the beginning of the government, we see the South got the better end of this compromise.

The Control of Commerce. — The next dispute arose over giving Congress full power to regulate all foreign trade and commerce as well as that between the states. Most of the delegates saw the importance and the necessity of placing this control of commerce in the hands of Congress, but some of the Southern states feared Congress might stop the foreign importation of slaves. A third compromise was effected, giving Congress full control over foreign commerce, but stating that the importation of slaves should not be prohibited prior to the year 1808.

There were still other compromises found necessary. In fact, the whole Constitution has been called a "group of compromises." After four months of debate the members had finished their stupendous task of making the Constitution of the United States. So they signed their names to it and adjourned.

The Constitution before the People. — A splendid form of government it was, but the states had not yet accepted it, and there were many doubts and fears as to how the people would look upon it. The Constitution was sent to

the states to be accepted or rejected by state conventions to which the people sent delegates to act for them.

There was a stormy session in every state convention, some of which at first rejected the new Constitution; but the arguments of Hamilton, Madison, and others in favor of it were printed and spread broadcast, and these finally convinced the majority of the people. When the Constitution had been accepted by nine states in 1788, it was established, and preparations were made to elect officers under the new government. The other states voted later to come into the new union.

Amending the Constitution. — The fathers of the Constitution did not imagine they had constructed a form of government so perfect that it would never need to be changed or improved. So they provided a way of amending it. By a two-thirds vote of both houses, Congress may frame an amendment and submit it to the states for their approval; or, if two thirds of the state legislatures demand it, Congress must frame and submit an amendment upon the subject desired. In either case, three fourths of all the states, acting either through their legislatures or through conventions called especially in each state for that purpose, must ratify or approve the amendment before it can become a part of the Constitution.

In all, seventeen amendments have been made to the original Constitution, two of them recently. One of the recent amendments has given Congress power to levy an income tax, and the other gives the people of the United States the right to choose their United States senators directly, instead of leaving their election to the state legislatures.

Checks and Balances. — The Constitution is so framed that one part of our government acts as a check upon an-

other part. One officer is given a duty to perform, while another is chosen to superintend the first with other duties besides. If Congress passes an unwise measure, the President may veto it; while if he vetoes a wise bill, Congress may yet pass it over his veto by a two-thirds vote. If Congress should enact a law which is forbidden by the Constitution, the Supreme Court declares it null and void and of no effect. Then if the people are dissatisfied with the court's decision and wish to preserve the law, they may amend the Constitution and give Congress the power to make such a law. If the President willfully violates his trust, he may be impeached and removed. If a Senator or Congressman becomes corrupt, the house to which he belongs may expel him.

These checks and balances are found also in our state and city governments.

QUESTIONS

1. What was the Continental Congress? 2. What were the Articles of Confederation? 3. Why were the colonies afraid to make a strong central government? 4. Illustrate the weakness of this new government. 5. Why were the colonies drifting apart? 6. What is the "critical period" and why so called? 7. What led to the calling of a Constitutional Convention? 8. Name some of the notable men in that convention. 9. What were the main disputes and how were they decided? 10. Whose efforts were mainly instrumental in getting the states to adopt the Constitution? 11. How may the Constitution be amended? 12. Why is our government called one of checks and balances?

CHAPTER XXXIV

CONGRESS

Congress. — Congress, the national lawmaking body, is composed of two houses, the Senate and the House of Representatives. Under the Confederation there was but a single body, or chamber, which was considered a failure; but when the Constitution was framed, all the states except Pennsylvania and Georgia had two houses of their own; so it was an easy matter to use the same plan in the national government. As we have said, it was believed that one house would check the decisions of the other, and there would be less danger of hasty and unwise legislation.

The House of Representatives. — The lower House is an assembly representing the population of the whole country as if it were all in one great state. It is composed of members chosen every other year by the citizens of each state. A candidate for election to the House of Representatives must be at least twenty-five years old; must have been seven years a citizen of the United States, and a citizen of the state from which he is chosen.

A term of two years is a short one, but it was thought best to give the people frequent opportunity to express their wishes through an election. In this way the representatives wishing to be reelected must listen more attentively to the desires of their districts in the matter of laws. At present there are over four hundred members of the House of Representatives.

The Constitution provides that each state shall have



House of Representatives, Washington.

at least one representative, and several states have but one; but those of greater population are divided into districts of equal population and are entitled to a representative from each district. The organized territories are each entitled to send to the House a delegate, who is allowed to speak on questions relating to his territory, but may not vote.

When a vacancy occurs in the representation of any state on account of death or other cause, it is the duty of the governor of that state to call a special election in the particular district of his state to fill the vacancy for the remainder of the two-year term.

The House of Representatives chooses one of its members to be its presiding officer, called the Speaker. The name has come to us from England. In the early history of the House of Commons there was occasional need for some one to speak

in its behalf before the Crown. It was natural for its presiding officer to be its spokesman on such occasions, and so the name was given to the presiding officer. The title was given to the presiding officers in the assemblies of the colonies and later passed to the state legislatures.

The Speaker presides over the debates, puts the motions, and decides points of order. He also appoints the numerous committees of the House of Representatives.

So many bills are proposed in each session of Congress that it is utterly impossible for the House to discuss even a small portion of them. In one session of the 56th Congress 12,152 bills were introduced in both houses and there were only 137 working days. When we are reminded that it sometimes takes several days, or even weeks, to consider one important measure, we wonder what becomes of all those thousands of bills. Since it is clearly impossible for the House as a whole to consider and discuss them, the custom has arisen of appointing committees to sift out the important bills. There are more than fifty of these committees appointed by the Speaker. Among the most important House Committees are the Ways and Means Committee, which has charge of all bills for raising revenue, the Appropriations Committee, the Banking and Currency Committee, and one on Foreign Affairs. These committees vary in the number of members from five to seventeen. Every member of the House is on some committee, and some members have places on several.

When a bill is presented to the House by the reading of its title, the Speaker immediately refers it to the proper committee. Only a small proportion of the bills are ever reported back to the House, perhaps five or ten out of every hundred. The others are "pigeon-holed" or "shelved," or said to be "killed in committee." By far the greatest

part of the work of Congress must therefore be done, not on the floor of the Senate and the House, but in the committees' rooms. Since the Speaker appoints all these committees, he usually sees to it that there is a majority of his party friends on each one, and in that way he has power in pushing a bill through or in smothering it in the committee. No other officer of our government, save the President, has such great power.

The Senate. — The Senate is composed of two members from each state, chosen for a term of six years. In the Constitutional Convention it was decided that there should be some members of Congress who would link the state governments more closely to the national government, yet still see to it that the powers and rights of the state were protected and not encroached upon by the central government. For that reason the Senators were to be elected by



The Senate Chamber in the Capitol, Washington.

the state legislatures to represent the states, while the members of the House were to be elected directly by the people. This has only recently been changed.

Within the last few years the presence of numerous millionaires in the Senate and the hints of corrupt voting in the legislatures that elected them created much dissatisfaction among the people of the United States. Consequently they began urging that the Senators be elected directly by the people. At first the Senate refused to allow an amendment on this point to pass. But the instances of corruption in state legislatures kept recurring and the demand for a popular election grew so strong that the Senate could no longer resist. An amendment was therefore passed by Congress and sent to the states for their approval. It has been ratified by the necessary three fourths of the state legislatures and is now a part of the Constitution.

Alexander Hamilton was in favor of choosing Senators for life or during good behavior, while others of the Convention suggested terms of nine years, seven years, five, four, and three years. Six years was finally decided upon as placing the Senators a little farther from the chance of losing office, so that they might the more often follow their own judgment rather than the demands of the people. The voice of the people is at times at fault, and it takes a little time for them to see their error. A Senator must be at least thirty years old. The Senate has always been composed of men who are older than the members of the House, and on the whole that body is supposed to possess greater dignity and learning. It has a reputation as a legislative body second to no other in the world.

The Senate is presided over by the Vice President. It does its work in much the same manner as the House,

save that the committees are chosen by the body rather than by the presiding officer. The Vice President has little power and not even a vote except in case of a tie.

Bills Becoming Laws. — Bills pass Congress and become laws in much the same manner as in the state legislatures. After passing both houses by a simple majority of one or more, they are sent to the President for his signature. If he does not approve a bill, he returns it to the house where it originated, stating his objections. This is called a veto. The bill may yet become a law by being passed by both houses with a two-thirds majority in each case.

QUESTIONS

1. How did our national Congress come to have two houses? 2. What is the lower House called? Why? 3. What qualifications must a representative have? 4. Why was his term made short? 5. How are the representatives appointed among the states? 6. How are vacancies in the House filled? 7. Who is the Speaker? 8. State his duties. 9. The manner in which he is chosen. 10. What is the purpose of committees in the House? 11. Name a few of the leading committees. 12. What becomes of the great number of bills introduced into the House? 13. Who compose the Senate? 14. How has the election of Senators been changed recently? 15. What is the term of a Senator? 16. Why was it made longer than that of a representative? 17. Describe the process by which a bill becomes a law.

CHAPTER XXXV

NATIONAL COURTS

National Courts. — One of the few new features in the Constitution was the creation of a national Supreme Court. Hamilton declared that the lack of a national judiciary, or court, was the crowning weakness of the Confederation. "Laws," said Hamilton, "are a dead letter without courts to expound and define their true meaning and operation."

Without such courts the Confederation was held together by such slight ties that it was ready to break apart at any minute. A government needs courts to enforce its laws by deciding when they have been violated and what punishments are to be inflicted for this disobedience. The national courts bind the states of the country firmly together in one union.

The national courts consist of a Supreme Court, Circuit and District Courts. In recent years there has been added a Commerce Court.

It was intended that the courts should be free from politics in order that all citizens might have a fair hearing in them. For this reason United States judges are all appointed for life or during good behavior, placing them beyond the reach of political powers. They are appointed by the President with the approval of the Senate. By act of Congress of 1903 the salary of the Chief Justice was fixed at \$13,000 a year; that of the Associate Justices at \$12,000.



Justices of the Supreme Court.

The Circuit Judges receive \$7500 and the District Judges \$6000 annually.

The Supreme, Circuit, and District Courts. — The Supreme Court consists of a Chief Justice and eight Associate Justices. It holds annual sessions in Washington, beginning on the second Monday in October and continuing till May or June. This is the highest court in America, and it has many duties. It is the chief protector of the Constitution, because it decides what laws passed by Congress are contrary to the Constitution and pronounces them null and void.

In recent years some cases of great importance to the people have been brought before this court. Several of the great industrial "trusts" have been abolished by it, notably the Standard Oil Company and others which were held to be unlawful because they were restraining free trade among the people. Below the Supreme Court are the Circuit and District Courts, which try less important cases that are sometimes appealed to the Supreme Court.

The Commerce Court. — The Commerce Court has a large and very important field of duty. It decides such questions as the fairness of freight rates on the railroads. Railroads were formerly free to charge whatever rates they pleased, and in many cases they abused shippers intolerably. This court was established to adjust all grievances. Because of the many large combinations of capital engaged in trade, the field of interstate trade has become a very important one.

QUESTIONS

1. Discuss the courts under the Articles of Confederation. 2. What purpose do the national courts serve? 3. How were the courts made free from political influence? 4. What salaries are paid to the Supreme Court Judges? 5. Discuss the Supreme Court. 6. What is the Commerce Court?

CHAPTER XXXVI

THE PRESIDENCY

The Office of President. — One of the greatest offices any man can hold is that of President of the United States. We have said that the chief weakness of the Articles of Confederation grew out of the fact that there was no executive to enforce laws. The members of the Constitutional Convention were determined to do away with this weakness. Some members wished to place the executive power in the hands of a committee. They feared to give so much power to one man, who might be tempted to make himself king. But since a committee cannot do things so promptly as a single person, as its members must discuss matters and will often disagree, the Convention finally decided that in order to get the laws enforced firmly and quickly, it would be better to put this great power in the hands of a President.

The Term of Office. — Then the question arose as to how long the President's term of office should be. Some preferred a short term of three years, so that the country might the sooner rid itself of a man who proved unsatisfactory. Others preferred a longer term of seven years, in order that the President might have time to carry out his policies. Hamilton and Madison wished to make the term during good behavior, whether a few years or many. The majority, however, thought this was too much like having a king, and so it was finally decided that the President's term of office should be for four years and that he might

be reëlected for other terms. Washington and Jefferson each refused a third term for personal reasons, and there exists to-day a strong prejudice against retaining any President in office longer than eight years.

Nevertheless there are many people to-day who think four years is too short a term, because the presidential election always disturbs the business of the country. There are others who would limit the office to one term, because they say that the President often uses much of his time the first term in making friends and laying plans for reëlection. In order to please politicians who would oppose him later if he should cross their wishes, he is tempted to do many things he ought not to do. Still other people advocate a six-year term for the President, with no second term open to him.

The Choice and Election of a President. — How to choose the President was one of the most troublesome questions of the Convention. Many plans were proposed. Some believed that the President should be chosen by the people, but others objected, saying that the citizens had no means of knowing what sort of man would be suitable for that responsible office, and they would therefore be liable to make an unwise choice. For a considerable time the method most in favor was to have the President chosen by Congress, as he is in Switzerland to-day. Then it occurred to them that he might become a mere tool of Congress, whereas they wished the President to be independent of that body. It was finally decided that the President should be chosen by electors who should be appointed in whatever way the state legislatures might direct.

Each state chooses as many electors as it has senators and representatives in Congress, and these electors meet at their respective state capitals and ballot for President



The Democratic Presidential Convention, 1912, Baltimore.

and Vice President. These ballots from all the state capitals are sent to Congress, where they are counted. Provided he has a majority of all the votes cast, the man having the highest number of ballots is elected. If no candidate obtains a simple majority, the House of Representatives proceeds to choose a President from the three who received the highest number of electoral votes.

It is interesting to know that the fathers of the Constitution feared to intrust the choice of a President to the people directly. But in spite of the purpose of those who made the Constitution, the citizens now have the power of choice. It has come about in this way: All state legislatures have granted the people the right to choose the presidential electors. Through great party conventions the people set up their candidates for President, and then proceed to choose only such electors as will agree beforehand to vote for the people's candidate. It was the purpose of the convention that made the Constitution that the electors should be free to vote for whom they pleased, but the citizens have found a way to dictate by exacting a promise before choosing the electors.

The Duties of the President. — There are many duties of the President enumerated in the Constitution. Our President has charge of all dealings with foreign nations. He makes treaties that become law when ratified by two thirds of the Senate. He receives foreign ambassadors and appoints a host of officials, chief of whom are postmasters, cabinet officers, and United States judges. The number of appointments at first was small, but it has increased rapidly with the country's growth.

The early Presidents seldom removed competent officials who had been appointed by their predecessors, but Andrew Jackson took the ground that he had a right to remove all

such appointive officers and give their places to his political friends. He removed two thousand in one year, more than all the Presidents before him had removed. This custom, known as the "spoils system," was followed by succeeding Presidents until 1883, when Congress passed a civil service law under which many classes of public offices are filled by appointment from a list of men who have passed the civil service examination. They hold office for life or during satisfactory service. This has produced a higher grade of service and a more competent class of public officials, and the President is relieved of much of the annoyance of the countless office seekers who attack the White House in droves after each presidential election, but particularly when a new party has come into power.

The President has a share in lawmaking. He has the veto power, which is used in the same way as that of a state governor. Many bills of Congress have been killed by the President's veto, because the necessary two-thirds vote favorable to it could not afterwards be secured in both houses. The President has therefore been called the "third house of Congress."

Whenever Congress meets, the President delivers to the two houses a message recommending that laws be made to cover certain timely public affairs. The early Presidents read their messages before a joint meeting of both houses, but for a hundred years the messages had been sent to Congress and read by the clerk. President Wilson has recently adopted the old custom of appearing in person and reading his message.

The President is the commander in chief of the American army and navy, but no President has taken personal command during his term of office. In the time of discussion of the Constitution, some people feared to place the army

and navy in the President's hands for fear he might use them to make himself king. The President is not allowed to declare war, only Congress has this power; but he might bring on a war by commanding the army or navy to attack a foreign power. United States troops are used to protect government property in times of strikes or other disorders.

The Cabinet. — So great is the power of the President and so heavy are his duties that he needs many helpers or advisers. These men are appointed by him and are known as the President's Cabinet.

The Vice President. — The Vice President is chosen in a way similar to that of the President, except that when no candidate obtains a simple majority of the electoral vote, the Senate chooses a Vice President from the two candidates standing highest on the list. As we have read, the Vice President presides over the Senate. In case of the President's death the Vice President succeeds to his office and duties.

QUESTIONS

1. Why did the fathers create the office of President? 2. Why was the power not given to a committee of several men? 3. What difference of opinion was there regarding the President's term of office? 4. Why do many people of to-day favor a change? 5. What ways of electing the President were suggested? 6. How is he now chosen? 7. How has it come about that the people now really elect the President? 8. Discuss the President's powers. 9. What is the spoils system? 10. Why is the President sometimes called the "third house"? 11. What constitutes the President's Cabinet? 12. How is the Vice President elected?

CHAPTER XXXVII

THE STATE DEPARTMENT

The Secretary of State. — The most dignified place in the President's Cabinet is that of Secretary of State. It is the prize often bestowed on the man who has been most influential in the election of the President. In the early days of the Republic this position was regarded as the stepping-stone to the presidency. Jefferson, Madison, Monroe, and J. Q. Adams all served as secretaries of state before they were chosen Presidents. In cabinet meetings, the Secretary of State occupies the seat of honor at the President's right. In case of the sudden death or removal from office of both the President and Vice President, the Secretary of State becomes President.

Work of the State Department. — Under the direction of the President, the Secretary of State has charge of all foreign relations of our government. He carries on the correspondence with the men sent to represent our nation in foreign countries; he receives the ambassadors and others sent here by other nations, and introduces them to the President. When the President desires to communicate with any state governor, he does so through the state department. Recently when the state of California was considering the passage of a law depriving the Japanese of the privilege of owning farm land in that state, President Wilson sent Mr. Bryan, Secretary of State, to discuss the matter with Governor Johnson. The Secretary of State has charge of all treaties made with foreign powers; he has

the preserving and publishing of all laws and acts of Congress. The great seal of the United States is in his hands, and he affixes it to all the documents signed by the President.

The Secretary of State has several assistant secretaries, a chief clerk, six chiefs of bureaus, one translator, one private secretary, and more than fifty clerks, besides many others — a total of over a hundred who make up the office force of the state department.

The work is divided up among different groups of men, known as bureaus. For example, the correspondence with England and France and other nations is assigned to the Diplomatic Bureau. All incoming letters and messages go first to the Bureau of Indexes and Archives, where they are opened and a record made of them; then the chief clerk sends them to the proper person in the department bureau, the important ones going to the Secretary of State himself. The Diplomatic Bureau writes the letters of reply, sending them to the Secretary of State for his approval and signature, after which the letters go to the Bureau of Indexes and Archives to be indexed and then to the Diplomatic Bureau to be mailed. This is what is known as government "red tape," but we can see why it is necessary to keep careful records and convenient indexes and files of all the government correspondence.

Should a prince or princess be born to one of the royal families of a foreign nation, other kings and queens are interested because they may later wish a husband or a wife for one of their own royal children. So letters of congratulation are sent by all nations assuring the happy parents of their great joy over this event. Our government, for courtesy's sake, always joins in sending such letters, though clearly it would be impossible for foreign governments to

send congratulations on the birth of our future Presidents.

Many of the President's addresses and Thanksgiving Proclamations are written by the State Department; on the other hand, the President, himself, sometimes writes many of the dispatches of importance to be sent out by the State Department.

The President meets in a social way all ambassadors from foreign countries in Washington; but he transacts no business whatever with them directly. All this must be done through the State Department.

Foreign Representatives. — The United States and all other nations send representatives to foreign countries. Our country has now about 38 ambassadors and ministers at various foreign capitals. Those at London, Paris, Berlin, and other leading countries are called ambassadors and those sent to nations of less importance are styled ministers. Besides these we send consuls to all the leading cities abroad to look after the commercial interests of the United States in those districts. Most of these foreign representatives of ours are very poorly paid when compared with those representing other nations at Washington.

The consuls, of which there are more than twelve hundred in the various foreign cities, look after the business interests of our citizens abroad. They have many duties. They protect and guard American commerce; they provide for destitute American sailors and send them home. If one of our citizens dies abroad with no one to look after his property, a consul attends to it. Consuls keep a record of the arrival and departure from their ports of all American ships and their cargoes, and they look after vessels that are wrecked. They report to America any new inventions or improvements in manufacturing processes that they

observe abroad. Also all useful information relating to scientific discoveries or progress in the useful arts and trades is reported by them.

Our country has been very lax in building up an effective consular service abroad. Other nations give to their consuls a thorough training and then a life appointment at a good salary. They thus secure a high grade of service. We fail to give our consuls the training, we pay them poorly, and many of the best men are discharged for political reasons when a new party gets into power. With a better system, our consuls would greatly extend our foreign trade and commerce.

QUESTIONS

1. What is the chief office in the cabinet?
2. What are some of the duties of the Secretary of State?
3. Tell something of the work of the State Department.
4. What force of workers are needed in this Department?
5. What is a bureau?
6. What assistance does the State Department furnish the President?
7. How is business transacted with foreign countries?
8. Discuss our consular service.
9. In what respect are we behind other countries in this matter?

CHAPTER XXXVIII

THE TREASURY DEPARTMENT

National Revenue. — We have already learned how necessary taxes or money is to the operation of our city and state governments, and it is, if possible, more important to our national government. Without money we should never have won in our war of independence, nor could we protect ourselves for a single year from enemies ready to spring up against us at the first show of weakness. We must have revenue and men appointed to look after the money affairs of the government. Without these our mails would choke the boxes, the courts would hold no terms to settle disputes, and criminals would neither be caught nor tried. All public officers would abandon their posts of service and the soldiers and the sailors would desert the flag. Worst of all, our foreign debts going unpaid would shortly bring on war with other powers.

Under the Articles of Confederation, as we have learned, the central government had no power to levy taxes or impose tariffs on commerce. It could only request the states to contribute their just proportion of the expenses of the government; and if they refused, nothing could be done about it. But under the Constitution this weakness was remedied by giving Congress power to tax the people directly if necessary, to impose tariff duties on foreign goods imported, and other means of taxation. The daily expense of carrying on our government amounts to a vast sum of

money, and we may well wonder how the government obtains so much.

The chief revenue is obtained by laying a tariff on imports and by taxing distilled liquors, beer, tobacco, and oleo-margarine. The Constitution has recently been changed so as to give Congress power to lay an income tax, that is, a tax on every citizen according to his yearly income.

The Treasury Department. — The care of all the public funds of the United States is awarded to the Treasury Department. It is the steam plant from which all the other departments get their power. The head of this department, the Secretary of the Treasury, is a member of the President's Cabinet. It is the department's duty to collect all tariff duties at the ports where foreign goods enter our country; to collect the internal revenue on whisky, tobacco, and the like; to issue money in the form of coins and paper money called currency; to pay our debts, such as bonds, and interest on them; and to control the national banks of the country.

The Bureau of Engraving and Printing. — The Treasury Department is the most extensive and complex of the executive departments. Under it, the Bureau of Engraving and Printing alone employs about 1600 people. Here is done the engraving of plates and the printing of all United States paper money, bonds, revenue stamps, and postage stamps.

United States Mints. — Under the Treasury Department is also the direction of the United States mints where the government coins its money. They are located at Philadelphia, Denver, New Orleans, and San Francisco. Gold and silver have become the chief money metals on account of their high value, their tendency not to corrode or rust, and the ease with which they may be worked. Gold or



Where Coins are Made.

The Mint, Philadelphia, Pa.

A Milling Machine.

The Counting Room.

A Coining Machine.

silver ore must be refined before it is sent to the mint. Refined gold or silver, called bullion, must first be assayed, or tested, to determine its purity. Both metals, when pure, are too soft for use as money, so an alloy of copper is added to give hardness and wearing qualities to them. A mixture of one tenth copper and nine tenths of either gold or silver constitutes the standard metal, which is nine tenths pure.

The standard metal is rolled into strips of the thickness of the coin to be made. From these strips round pieces are cut by heavy machinery. Then each piece is weighed, and, when found correct, it goes to another machine, from which it comes forth with edge slightly raised on both sides. The purpose of this raised edge is to decrease the wear on the faces of the coin. It is then put under immense pressure between two engraved dies which stamp the proper inscriptions on its faces. At the same time the edge of the coin is milled. Then it is ready to do service for the people as money.

The Life-saving Service. — Under the Treasury Department is also the Life-saving Service, which is of great importance. Upon the danger points of the ocean coast and of the Great Lakes are located nearly three hundred life-saving stations, where more than two thousand men are employed. In the year 1903 there were 4337 lives in peril from disasters on the water, and such excellent service was rendered by the life-savers that only 24 of these were lost. In the same year the property endangered was worth over nine million dollars, and about nine tenths of this vast amount was saved.

QUESTIONS

1. Discuss the importance of the Treasury Department.
2. What would happen if the department failed to do its duty?
3. What are the chief means of obtaining funds to run our government?
4. What are some of the duties of the Secretary of the Treasury?
5. Describe the mints.
6. What is standard metal?
7. What is the purpose of alloy?
8. Describe how coins are made.
9. What can you say of the life-saving service?

CHAPTER XXXIX

THE POST OFFICE DEPARTMENT

Uncle Sam, the Mail Carrier. — The carrying of all the mail in the United States has been placed by law in the hands of the government. It is illegal for any private individual or company to endeavor to carry anybody's mail regularly from place to place. All mail matters are now under the charge of the Postmaster-General.

The Post Office Department. — President Washington thought the directorship of the Post Office Department too insignificant to admit the Postmaster-General to his cabinet, because the country's mail was then limited; but in 1829 the post office had become such an important department that the head was given a place at the cabinet table. The post office has since come to be the one department of government in which all the people are personally interested. Every day millions upon millions of our citizens are intrusting to the mails letters and postal cards, money orders and packages, for the safe and speedy delivery of which they are deeply concerned.

Besides being the head of the post office department, the Postmaster-General appoints nearly all the officers of the department. He also makes postal treaties. Nearly 5000 postmasters in the larger cities whose annual salaries are over \$1000 are appointed by the President with the consent of the Senate.

There are four Assistant Postmaster-Generals appointed by the President. They are in charge of the four bureaus

of the department. The first assistant looks after the general management of post offices with their clerks and carriers; the second has charge of the transportation of mails; the third furnishes stamps and has charge of the money affairs; while the fourth assistant looks after the appointment of about 75,000 postmasters and directs the inspectors.

There has been too much politics in the appointment of postmasters to insure this department the best management. It would be far better if all postmasters could be placed under civil service rules and receive appointments, after passing the proper examinations, on account of merit and ability. They should hold office for life or during good behavior and satisfactory service.

The post office department is a great system of business, and it needs at its head a trained business man who knows the value of every hour saved in delivering a letter. Postmaster-General Wanamaker said, "I want to keep the mail bag open to the latest possible minute, then get it to its destination in the shortest possible time, and then get each separate piece of mail to the person for whom it is meant in the quickest possible way."

Improved Service. — In the days of our first President an effort was made to speed the mails — to move them at the rate of one hundred miles in twenty-four hours. The carriers were then taking nearly thirty hours to go on horseback or by coach from Philadelphia to New York. This distance is now covered by a fast mail in a very few hours. Our mail trains now run at the rate of fifty or sixty miles an hour. Mails are taken up and delivered without stops. They are sorted and put up in the postal cars so as to go as directly as possible to their destination.

The rates of postage in the early days of the Constitution

were high. Six cents was charged for one letter sheet for thirty miles; for sixty miles, eight cents; for one hundred miles, ten cents; and so increasing to as much as twenty-five cents for distances over 450 miles. A letter weighing one ounce is now carried to any post office in the land for two cents, and if the person to whom it is addressed cannot be found, it is carried back to the sender, sometimes a distance altogether of 5000 miles.

In the old days envelopes were not used. Letters were folded so the number of sheets could be counted. Stamps were not used then; the amount of postage was written on the letter by the postmaster, and if the sender paid it, the word "paid" was added. If he did not, the one to whom the letter was sent was required to pay the postage. Since the post office at that time was required to support itself, letters were not sent from the country towns until enough postage had been deposited at the post office to pay the expense of sending them.

Newspapers and books could not at first be sent by mail. After a time there was a great demand for cheap newspaper and magazine postage, and this has led to a reduction of rates greatly below the actual cost to the government for carrying such mails. In 1892 the Postmaster-General said that the present letter rate paid twice the cost of the letter mail, but that book and newspaper mail was carried at a loss of six cents a pound. Cheap postage on books, magazines, and newspapers has encouraged the people to read, and thus is justified as a measure of educating the people.

Free Delivery. — For many, many years every one had to go to the post office for his mail. After a time the larger cities had postmen to deliver the mail daily to the homes and offices of the citizens, and this movement of better

service has grown until even small cities have more than one daily free delivery. In still more recent years rural free delivery has become an accomplished fact, to the great convenience of the farmer. Rural free delivery is proving a costly service for the department, but it makes country life far more desirable to the farmer; and it greatly stimulates adult education by enabling everybody to keep in close touch with what is going on in the world. The post office department has come to be the most important department of all in its bearing on the education of the citizens of the United States.

Registered Mail and Special Delivery. — Registered mail is a sort of government insurance for valuable articles sent through the post office. To insure its safe delivery, the package is registered at every post office through which it passes. Special delivery stamps, costing ten cents, pay for special and prompt delivery of letters and packages which bear them.

Postal Savings. — A few years ago the post office added another feature of service to the people — a postal savings department. Banks where the people's money has been placed have frequently become bankrupt and the depositors have lost heavily. There was a feeling that if the United States government would accept the people's savings through the post office, it would be in safe hands. The banks were naturally opposed to this, and for years their influence prevented its realization. But finally there were elected to Congress enough friends of the measure to push it through. Now the postal savings department has in safe keeping millions of dollars of the people's money on which the government pays two per cent interest.

The Parcels Post. — More recently still has come the parcels post, which greatly enlarges the work and usefulness

of the post office. The express companies opposed this measure for years, but it was proving of such value and service among foreign nations that our government finally adopted it. Millions of packages are carried daily, containing all sorts of things. Every one is benefiting from it, the farmers especially.

The Postal Union. — In 1891 the United States entered into postal treaties with foreign governments. Over fifty different nations have joined in a Postal Union for purposes of carrying foreign mail at rates agreed upon. In this way correspondence between citizens of different countries is encouraged by reasonable rates.

QUESTIONS

1. Can any one engage in the business of carrying mail? 2. Why was there no Postmaster-General in Washington's day? 3. Tell about the improvement in mail service. 4. What were the old-time postal rates? 5. Describe the old-time envelope and stamp. 6. Tell about newspaper postage. 7. Free delivery. 8. What are postal savings? 9. Discuss the parcels post. 10. What is the purpose of registered mail? 11. What do you think of civil service rules?

CHAPTER XL

THE WAR DEPARTMENT

The War Secretary. — The military affairs of our country are placed in the hands of the Department of War, at the head of which is a Secretary appointed by the President as a member of his cabinet. By the Constitution, the President is made commander in chief, but he is never burdened with any but the most important questions relating to the army.

The Secretary of War has under his charge such duties as securing from Congress the necessary appropriation of money for the upkeep of the army, the purchasing of supplies, the transportation of the army from place to place. He has under his care the Military Academy at West Point and all the national cemeteries. He has also the oversight of river and harbor improvements, and it is his duty to prevent obstructions to navigation.

Work of the War Department. — The work of the War Department is divided among eleven bureaus. At the head of each bureau is a regular army officer. The Adjutant-General issues orders for the muster of troops, for the manner of organizing them, and for their movements. He keeps all army records.

The Inspector-General visits all military posts, prisons, and the Military Academy. He reports upon matters of equipment and discipline of troops and the sanitary or health conditions of posts and prisons. He examines the

reports of the officers who pay out the money of the department.

The Quartermaster-General is charged with providing practically all army supplies except arms, rations, and medicines. He directs how the troops are to be clothed, armed, and transported.

The food of the army is supplied by the Commissary-General, and medicine is furnished by the Surgeon-General. The arms are obtained by the Chief of Ordinance. The guns and weapons used by the army are generally manufactured and repaired in the United States arsenals, which are under the control of the War Department. The arsenals at Springfield, Mass., and Rock Island, Ill., manufacture rifles and carbines; while cannon and mortars are made at the arsenal at West Troy, N.Y.

Modern Equipment. — The old, slow-firing guns formerly used in the army have been exchanged for the long-range, quick-firing, breech-loading, modern gun. The old forts with their stone walls are giving way to earth parapets and holes in the ground. Large rifled cannon are now used in our coast defenses. They carry projectiles weighing 1000 pounds and more accurately a distance of thirteen miles. The guns are mounted upon disappearing carriages, or platforms, and behind low parapets. The range is found and the gun pointed while it is in a pit below the natural surface. The touch of a lever lifts the gun above the surface, when it is quickly fired and lowered again into the pit to be reloaded.

The old mortar had no accurate range and could not regularly hit anything smaller than a good-sized city. But the new rifled mortar will find a ship's deck accurately. Our coast cities are now well defended by large guns on shore.



War Department, West Point.

The Training of Army Officers. — The officers of the army are chiefly graduates of the West Point Military Academy, though a door is open to deserving soldiers who have made good records as noncommissioned officers and passed an examination.

The West Point Military Academy is situated at a beautiful bend in the Hudson River above New York City. There are splendid buildings and modern forts; there are fields and horses for the exercise of both infantry and cavalry. The corps of cadets, or students, at this military school is composed of one student from each Congressional District, one from each Territory, one from the District of Columbia, and one hundred from the United States at large. They are all appointed by the President, but it has become the custom for the representatives each to select one cadet from his district, while the President appoints the hundred that are chosen at large.

The choice is usually made after a competitive examination. A cadet must be between seventeen and twenty-two years of age. His expenses while at this school are paid by the government's appropriating \$540 a year for each student. The course covers four years, and the graduate has a splendid education. Graduates are commissioned as second lieutenants in the United States army. If there are more graduates than vacancies in the army, those not needed are honorably discharged with the payment of one year's salary.

QUESTIONS

1. What are some of the duties of the Secretary of War?
2. What are the duties of the Adjutant-General?
3. What officer is charged with the work of supplying the army?
4. What can you say of modern guns compared with old-time ones?
5. Where is West Point and for what noted?
6. Tell about the training of the cadets.

CHAPTER XLI

OTHER CABINET DEPARTMENTS

The Department of the Navy, etc.—The Secretary of the Navy has the same general duties and bears the same relation to the marine forces of the United States as does the Secretary of War to the land forces. His responsibilities in time of war are much heavier than in times of peace. The work of the department is divided among several bureaus. The Naval Academy at Annapolis, Md., is organized upon a plan similar to that of the Military Academy at West Point, and the naval cadets are obliged to serve two years in the navy after their graduation. They are admitted between the ages of fourteen and eighteen and the course extends over six years.

Department of Justice.—The legal adviser of the President is called the Attorney-General. He also sits at the Cabinet table. He conducts all suits at law to which the United States is a party, either in the Supreme Court or in any other court; he exercises general supervision over all the United States district attorneys and marshals; and he examines titles to land when, for any reason, the government wishes to purchase the land.

Department of the Interior.—Just as the State Department takes charge of the foreign affairs of our nation, so does the Interior Department have to do with the home affairs. Here, as in the other departments, there are bureaus which are presided over by heads, usually called commissioners.



Bancroft Hall, Annapolis Naval Academy.

The Pension Office. — The Commissioner of Pensions examines all claims made by soldiers and sailors for pensions granted under the laws of Congress. He is the final judge in each case. In the year 1901 there were 997,735 pensioners on the rolls, to whom were paid annually about \$140,000,000. But the soldiers of the Civil War are all very old and great numbers are passing away every year, so while the pension fund has taken annually as much as one fourth of all the government's revenue, the sum is rapidly diminishing. The feeling prevails that those who risked their lives for the saving of the Republic should receive more honor every year.

Land Office. — The Commissioner of the Land Office has charge of the surveying and the selling of all the lands of our public domain. Shortly after the Revolution, the states that had claims to lands lying west of the Alleghany Mountains ceded them to the central government, and these lands became the public domain. They were added to by treaty, by purchase, and by war. The selling of all this property has meant an enormous amount of work for the Land Office, and there are millions of acres yet to be surveyed and sold.

The Patent Office. — The Constitution of the United States gives Congress the power to make laws encouraging the work of inventors by issuing to them patents rights. To authors are also given copyrights. These give to the writer or inventor the exclusive right for a limited time to sell his writings or inventions. A patent is valid for seventeen years, with the right of renewal for seven years more; a copyright is good for twenty-eight years, and the time may be extended fourteen years.

Department of Agriculture. — Perhaps no department of our government is now exerting so much good for the

future of our country as the Department of Agriculture. As the country becomes more and more populous we must make better use of our farm lands which have, in many cases, been abused and worn out by the ignorance of the farmers. The Department of Agriculture is the farmer's college, extending to him invaluable advice and suggestions for the improvement of crops and farm animals.

Experiment Stations. — In all the states and territories the government maintains model farms to ascertain the kinds of crops best adapted to the nature of the soil. These farms are managed by scientific men who keep careful records of everything bearing on the cultivation, growth, and yield of the crops. All this information, printed in pamphlet form, is sent broadcast to the farmers who are interested enough to ask for it. Most of the pamphlets are free, but a few are sold for a small sum.

Weather Bureau. — All over the country and upon the islands of the sea near the coast, signal stations are maintained, where officers observe carefully the condition of the weather. They make daily and sometimes hourly reports to the central office in Washington. By means of these reports, the chief officer at Washington and other officers at the chief cities are enabled to predict with much accuracy the probable weather conditions in any region for the succeeding twenty-four hours. In this way valuable assistance is given to farmers, and especially to seamen, who are warned of approaching storms.

Bureau of Animal Industry. — One of the important duties of the Department of Agriculture is that of inspecting and certifying the grade of meats intended for export. This inspection of meats is usually made at the packing houses. Parts of each carcass are subjected to the microscope and those found diseased are condemned and must not be used

for food. All live animals imported to this country are inspected, and those found to be diseased are slaughtered. The department also prevents diseased animals from being shipped from one state to another.

Department of Commerce. — The Département of Commerce is rapidly becoming a very important one. Under it are such bureaus as the Census and Immigration Bureaus, Foreign Commerce Bureau, the Bureaus of Weights and Measures, of Navigation, of Steamboat Inspection, the Fish Commission, the Coast Survey, the Lighthouse Board, and the Bureaus of Corporations and of Manufacture. This last-named bureau is assuming great importance because it is expected to investigate the organization, conduct, and management of corporations and combinations engaged in interstate commerce, and to see that all antitrust laws enacted by Congress are enforced. It also promotes American manufactures and encourages foreign trade.

Department of Labor. — The latest addition to the President's Cabinet is that of Secretary of Labor. It is his duty to gather and diffuse among the people useful information on subjects connected with labor, the earnings of laboring men and women, and how to advance their interests in education and in a social and moral way. This Secretary ascertains the cost of producing in foreign countries, the wages paid there, the hours of labor, the profits on the money invested in business, and the cost of living. The cause and settlement of labor troubles and many other important duties are placed with this department.

QUESTIONS

1. Tell about the Secretary of the Navy. 2. Where is the Naval Academy? 3. What are some of the duties of the Attorney-General? 4. What is the purpose of the Departments of the Interior? 5. Tell something about the Pension Office. 6. What is the Land Office? 7. Discuss the Patent Office. 8. What is the purpose of the Department of Agriculture? 9. What are Experiment Stations? 10. State the purpose of the Weather Bureau. 11. What duties devolve upon the Secretary of Commerce? 12. Discuss the Secretary of Labor's department.

CHAPTER XLII

POLITICAL PARTIES

Coöperation. — In any community the citizens may have difficulty in deciding what is the best policy to adopt for the common good. Each man has his own opinion as to how the government should be carried on, and this opinion is likely to differ from the opinion of others. A citizen who relies only on his own efforts to get his ideas carried out will certainly fail. Every one knows that it is folly to try to serve one's state or city single handed. A citizen must be willing to work in harmony with others; he must yield some of his opinions and coöperate with other voters on important issues. The highest type of citizen is not the one who is always opposed to plans suggested by his neighbors, but the one who is quickest to coöperate in carrying through a good proposal even though he had no part in originating it. Teamwork is just as necessary to good government as it is in football or baseball. In order to get this necessary teamwork and to make it effective, men of like ideas and principles organize what is called a political party. This party has its rules, its officers, and its political principles or platform. Party organization is necessary to our kind of government. Every boy and girl should early learn the important lesson of working together in harmony and good will.

Use of Organized Parties. — Parties serve other purposes besides that of enabling men and women of like ideas to join hands and put their measures through. Party men

help to inform the citizens about the questions of government. Sometimes, it is true, party managers deceive the people in order to win votes, but this reacts on the party when the truth becomes known. It is through party organization that a large proportion of the voters are gotten to the polls on election day. Carelessness about voting on the part of good people is one of the gravest dangers to our country. Business men are so occupied with their affairs that they begrudge the time given to voting. And so the scheming politicians have a chance to elect unworthy men.

Parties in our History. — There have been many different political parties in our country during its century and a quarter of life. Parties grow up for the purpose of solving new and important questions. The parties of the early days differed on the question of having a strong central government. Later came the questions of protective tariff and internal improvements such as the national road. The slavery issue brought forth new parties and revolutionized the old ones. After the war the treatment of the freed negroes and the method of reconstructing the seceded states were questions which caused men to differ widely. To-day there are such weighty questions to solve that it is hard to predict what parties will prevail a few years hence.

Loyalty to Party. — Men must be loyal to their party if they expect to win. Some voters are loyal because they hope for selfish gain through the party. They expect some paying office for themselves or for their friends, or they wish selfish favors, such as the business of furnishing the city with coal or other supplies. Perhaps they look for a profitable contract or franchise which may be awarded them for their support. We should not consider such citizens good party men, nor are they patriotic citizens.

On the contrary, they are enemies to the common good. It is this spirit that will quickly ruin the government of any city or state. Men should be loyal to their party because it has principles which they are glad to support and because it will enable them to make good laws; to choose good judges and honest, efficient officers to carry out the laws and the wishes of the community. Thus will happiness, justice, and prosperity prevail among all the people.

While men can most effectively serve their community as a rule by working with their party, there are times when the good citizen should "scratch" the party ticket. If the party has failed to nominate good men for office at the primaries, it is much better to vote for desirable men on another ticket. When one party has been in power for some time, corrupt men may get control of it and be willing to see selfish men elected if it will serve their purposes. It is then that the patriotic man "scratches" his ballot rather than vote for a candidate whom he distrusts although he is on his party ticket. By helping to defeat corrupt candidates he forces his friends to see that only by nominating good men for office can his party be sure to win.

True Service. — The noblest life any one can live is a life of service — service to one's family, service to one's fellow men, to one's city, state, or country. This does not necessarily mean service in the army; it means helping along every good cause that brings real blessing to the community. It means giving of one's time and labor and money in the form of taxes or contributions for the benefit of the life of the community. It means opposing one's neighbor sometimes for the good of the community. The good citizen looks first at home for the chance to serve his fellow man, and by serving his city well he is serving his country. Every citizen should ask himself: "How much genuine

sacrifice am I willing to make in time, labor, and money for the good of my community and my fellow men? ” The answer to this question will be a searching test of his real patriotism and good citizenship.

QUESTIONS

1. Why is there need of political parties? 2. What good results from them? 3. Mention questions that have brought forth or changed parties. 4. Why should men be loyal to their party? 5. When is it wise to “scratch” a ticket? 6. What is your idea of the duties of a good citizen? 7. Must a good citizen sometimes make personal enemies in order to do his duty to his city or state?

APPENDIX

CONSTITUTION OF THE UNITED STATES OF AMERICA

WE THE PEOPLE of the United States, in Order to form a more perfect Union, establish Justice, insure domestic Tranquillity, provide for the common defence, promote the general Welfare, and secure the Blessings of Liberty to ourselves and our Posterity, do ordain and establish this CONSTITUTION for the United States of America.

ARTICLE. I.

SECTION. 1. All legislative Powers herein granted shall be vested in a Congress of the United States, which shall consist of a Senate and House of Representatives.

SECTION. 2. The House of Representatives shall be composed of Members chosen every second Year by the People of the several States, and the Electors in each State shall have the Qualifications requisite for Electors of the most numerous Branch of the State Legislature.

No person shall be a Representative who shall not have attained to the Age of twenty-five Years, and been seven Years a Citizen of the United States, and who shall not, when elected, be an Inhabitant of that State in which he shall be chosen.

Representatives and direct Taxes shall be apportioned among the several States which may be included within this Union, according

QUESTIONS

1. Name the five objects for which the constitution was adopted. 2. Of what does Congress consist? 3. What is meant by legislative power? 4. For how long a term are the members of the House of Representatives chosen? 5. What are their qualifications? 6. Can a citizen of one state be chosen to represent a district of another? 7. In England a member of the House of Commons does not need to reside in the district he represents. What advantages has this method?

to their respective numbers, which shall be determined by adding to the whole Number of free Persons, including those bound to Service for a Term of Years, and excluding Indians not taxed, three fifths of all other Persons. The actual Enumeration shall be made within three Years after the first Meeting of the Congress of the United States, and within every subsequent Term of ten Years, in such Manner as they shall by Law direct. The number of Representatives shall not exceed one for every thirty Thousand, but each State shall have at Least one Representative; and until such enumeration shall be made, the State of New Hampshire shall be entitled to choose three, Massachusetts eight, Rhode Island and Providence Plantations one, Connecticut five, New-York six, New Jersey four, Pennsylvania eight, Delaware one, Maryland six, Virginia ten, North Carolina five, South Carolina five, and Georgia three.

When vacancies happen in the Representation from any State, the Executive Authority thereof shall issue Writs of Election to fill such Vacancies.

The House of Representatives shall choose their Speaker and other Officers; and shall have the sole Power of Impeachment.

SECTION. 3. The Senate of the United States shall be composed of two Senators from each State, chosen by the Legislature thereof, for six Years; and each Senator shall have one Vote.

Immediately after they shall be assembled in Consequence of the first Election, they shall be divided as equally as may be into three Classes. The Seats of the Senators of the first Class shall be vacated at the Expiration of the second Year, of the second Class at the Expiration of the fourth Year, and of the third Class at the Expiration of the sixth Year, so that one third may be chosen every second Year; and if Vacancies happen by Resignation, or otherwise, during the Recess of the Legislature of any State, the Executive thereof may make temporary Appointments until the next Meeting of the Legislature, which shall then fill such Vacancies.

No Person shall be a Senator who shall not have attained to the

QUESTIONS

1. What is meant by three fifths of all other persons? 2. Does our government as a usual procedure levy direct taxes upon the people? 3. How does our government obtain its revenue? 4. Can you suggest any states that now have only one Representative? 5. What happens when a vacancy occurs in the House? 6. How is the Speaker of the House chosen? 7. How is the Senate constituted?

Age of thirty Years, and been nine Years a Citizen of the United States, and who shall not, when elected, be an Inhabitant of that State for which he shall be chosen.

The Vice President of the United States shall be President of the Senate, but shall have no Vote, unless they be equally divided.

The Senate shall choose their other Officers, and also a President pro tempore, in the Absence of the Vice President, or when he shall exercise the Office of President of the United States.

The Senate shall have the sole Power to try all Impeachments. When sitting for that Purpose, they shall be on Oath or Affirmation. When the President of the United States is tried, the Chief Justice shall preside: And no Person shall be convicted without the Concurrence of two thirds of the Members present.

Judgment in Cases of Impeachment shall not extend further than to removal from Office, and disqualification to hold and enjoy any Office of honor, Trust or Profit under the United States: but the Party convicted shall nevertheless be liable and subject to Indictment, Trial, Judgment and Punishment, according to Law.

SECTION. 4. The Times, Places and Manner of holding Elections for Senators and Representatives, shall be prescribed in each State by the Legislature thereof; but the Congress may at any time by Law make or alter such Regulations, except as to the Places of choosing Senators.

The Congress shall assemble at least once in every Year, and such Meeting shall be on the first Monday in December, unless they shall by Law appoint a different Day.

SECTION. 5. Each House shall be the Judge of the Elections, Returns and Qualifications of its own Members, and a Majority of each shall constitute a Quorum to do Business; but a smaller Number may adjourn from day to day, and may be authorized to compel the Attendance of absent Members, in such Manner, and under such Penalties as each House may provide.

Each House may determine the Rules of its Proceedings, Punish its Members for disorderly Behaviour, and, with the Concurrence of two thirds, expel a member.

QUESTIONS

1. What are the necessary qualifications of a Senator? 2. What are the duties of the Vice President? 3. When can he vote? 4. What is meant by impeachment? 5. What punishment may be imposed on a President who has been removed by impeachment? 6. Look up the word "impeach" and decide whether or not Andrew Johnson was impeached.

Each House shall keep a Journal of its Proceedings, and from time to time publish the same, excepting such Parts as may in their Judgment require Secrecy; and the Yeas and Nays of the Members of either House on any question shall, at the Desire of one fifth of those Present, be entered on the Journal.

Neither House, during the Session of Congress, shall, without the Consent of the other, adjourn for more than three days, nor to any other Place than that in which the two Houses shall be sitting.

SECTION. 6. The Senators and Representatives shall receive a Compensation for their Services, to be ascertained by Law, and paid out of the Treasury of the United States. They shall in all Cases, except Treason, Felony and Breach of the Peace, be privileged from Arrest during their Attendance at the Session of their respective Houses, and in going to and returning from the same; and for any Speech or Debate in either House, they shall not be questioned in any other Place.

No Senator or Representative shall, during the Time for which he was elected, be appointed to any civil Office under the Authority of the United States, which shall have been created, or the Emoluments whereof shall have been encreased during such time; and no Person holding any Office under the United States, shall be a Member of either House during his Continuance in Office.

SECTION. 7. All Bills for raising Revenue shall originate in the House of Representatives; but the Senate may propose or concur with Amendments as on other Bills.

Every Bill which shall have passed the House of Representatives and the Senate, shall, before it become a Law, be presented to the President of the United States; If he approve he shall sign it, but if not he shall return it, with his Objections, to that House in which it shall have originated, who shall enter the Objections at large on their Journal, and proceed to reconsider it. If after such Reconsideration two thirds of that House shall agree to pass the Bill, it shall be sent, together

QUESTIONS

1. Who pays the salary of your Senators and Representatives?
2. In which House must all tariff measures originate?
3. Why?
4. Give the simplest way in which a bill may become a law.
5. What becomes of a bill which the President refuses to sign?
6. What is meant by "veto"? (Look it up in the dictionary.)
7. May a Senator or Representative hold any other office at the same time?
8. Why or why not?

with the Objections, to the other House, by which it shall likewise be reconsidered, and if approved by two thirds of that House, it shall become a law. But in all such Cases the Votes of both Houses shall be determined by Yeas and Nays, and the Names of the Persons voting for and against the Bill shall be entered on the Journal of each House respectively. If any Bill shall not be returned by the President within ten Days (Sundays excepted) after it shall have been presented to him, the same shall be a Law, in like Manner as if he had signed it, unless the Congress by their Adjournment prevent its Return, in which Case it shall not be a Law.

Every Order, Resolution, or Vote to which the Concurrence of the Senate and House of Representatives may be necessary (except on a question of Adjournment) shall be presented to the President of the United States; and before the Same shall take Effect, shall be approved by him, or being disapproved by him, shall be repassed by two thirds of the Senate and House of Representatives, according to the Rules and Limitations prescribed in the Case of a Bill.

SECTION. 8. The Congress shall have Power To lay and collect Taxes, Duties, Imposts and Excises, to pay the Debts and provide for the common Defence and general Welfare of the United States; but all Duties, Imposts and Excises shall be uniform throughout the United States;

To borrow Money on the credit of the United States;

To regulate Commerce with foreign Nations, and among the several States, and with the Indian Tribes;

To establish an uniform Rule of Naturalization, and uniform Laws on the subject of Bankruptcies throughout the United States;

To coin Money, regulate the Value thereof, and of foreign Coin, and fix the Standard of Weights and Measures;

To provide for the Punishment of counterfeiting the Securities and current Coin of the United States;

To establish Post Offices and post Roads;

To promote the Progress of Science and useful Arts, by securing

QUESTIONS

1. How may a bill be passed over a President's veto? 2. What happens if the President holds a bill in his possession for ten days? 3. Can you give a reason why all duties and taxes were made uniform throughout the country? 4. Name some powers of Congress. 5. Who may borrow money in the name of the United States? 6. Why was Congress given the right to regulate foreign commerce?

for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries ;

To constitute Tribunals inferior to the supreme Court ;

To define and punish Piracies and Felonies committed on the high Seas, and Offences against the Law of Nations ;

To declare War, grant Letters of Marque and Reprisal, and make Rules concerning Captures on Land and Water ;

To raise and support Armies, but no Appropriation of Money to that Use shall be for a longer Term than two Years ;

To provide and maintain a Navy ;

To make Rules for the Government and Regulation of the land and naval Forces ;

To provide for calling forth the Militia to execute the Laws of the Union, suppress Insurrections and repel Invasions ;

To provide for organizing, arming, and disciplining, the Militia, and for governing such Part of them as may be employed in the Service of the United States, reserving to the States respectively, the Appointment of the Officers, and the Authority of training the Militia according to the discipline prescribed by Congress ;

To exercise exclusive Legislation in all Cases whatsoever, over such District (not exceeding ten Miles square) as may, by Cession of particular States, and the Acceptance of Congress, become the Seat of the Government of the United States, and to exercise like Authority over all Places purchased by the Consent of the Legislature of the State in which the same shall be, for the Erection of Forts, Magazines, Arsenals, dock-Yards, and other needful Buildings ; — And

To make all Laws which shall be necessary and proper for carrying into Execution the foregoing Powers, and all other Powers vested by this Constitution in the Government of the United States, or in any Department or Officer thereof.

SECTION. 9. The Migration or Importation of such Persons as any of the States now existing shall think proper to admit, shall not be prohibited by the Congress prior to the Year one thousand eight hundred

QUESTIONS

1. Who has the power to declare war ? 2. How are authors and inventors protected ? 3. What courts may Congress establish ? 4. What people are referred to by the first paragraph of Section 9 ? 5. To which compromise of the Constitutional Convention does this section relate ? 6. See if you can find out whether or not Congress did forbid the importation of slaves after 1808. (Consult your history.)

and eight, but a Tax or duty may be imposed on such Importation, not exceeding ten dollars for each Person.

The Privilege of the Writ of Habeas Corpus shall not be suspended, unless when in Cases of Rebellion or Invasion the public Safety may require it.

No Bill of Attainder or ex post facto Law shall be passed.

No Capitation, or other direct, Tax, shall be laid, unless in Proportion to the Census or Enumeration herein before directed to be taken.

No Tax or Duty shall be laid on Articles exported from any State.

No Preference shall be given by any Regulation of Commerce or Revenue to the Ports of one State over those of another: nor shall Vessels bound to, or from, one State, be obliged to enter, clear, or pay Duties in another.

No Money shall be drawn from the Treasury, but in Consequence of Appropriations made by Law; and a regular Statement and Account of the Receipts and Expenditures of all public Money shall be published from time to time.

No Title of Nobility shall be granted by the United States: And no Person holding any Office of Profit or Trust under them, shall, without the Consent of the Congress, accept of any present, Emolument, Office, or Title, of any kind whatever, from any King, Prince, or foreign State.

SECTION. 10. No State shall enter into any Treaty, Alliance, or Confederation; grant Letters of Marque and Reprisal; coin Money; emit Bills of Credit; make any thing but gold and silver Coin a Tender in Payment of Debts; pass any Bill of Attainder, ex post facto Law or Law impairing the Obligation of Contracts, or grant any Title of Nobility.

No State shall, without the Consent of the Congress, lay any Imposts or Duties on Imports or Exports, except what may be absolutely necessary for executing its inspection Laws: and the net Produce of all Duties and Imposts, laid by any State on Imports or Exports, shall be for the Use of the Treasury of the United States; and all such Laws shall be subject to the Revision and Controul of the Congress.

QUESTIONS

1. Can Congress by law tax any article carried from one state to another?
2. Do you know why this provision was inserted in the Constitution?
3. Can a state tax articles shipped from its borders to other states?
4. Why was the rule made forbidding any Congressman to accept a present from a foreign ruler or country?
5. Can a state make a treaty with another state or with a foreign country?
6. Can you give a good reason for this rule?

No State shall, without the Consent of Congress, lay any Duty of Tonnage, keep Troops, or Ships of War in time of Peace, enter into any Agreement or Compact with another State, or with a foreign Power, or engage in War, unless actually invaded, or in such imminent Danger as will not admit of Delay.

ARTICLE. II.

SECTION. I. The executive Power shall be vested in a President of the United States of America. He shall hold his Office during the Term of four Years, and, together with the Vice President, chosen for the same Term, be elected, as follows

Each State shall appoint, in such Manner as the Legislature thereof may direct, a Number of Electors, equal to the whole Number of Senators and Representatives to which the State may be entitled in the Congress: but no Senator or Representative, or Person holding an Office of Trust or Profit under the United States, shall be appointed an Elector.

The Electors shall meet in their respective States, and vote by Ballot for two Persons, of whom one at least shall not be an Inhabitant of the same State with themselves. And they shall make a List of all the Persons voted for, and of the Number of Votes for each; which List they shall sign and certify, and transmit sealed to the Seat of the Government of the United States, directed to the President of the Senate. The President of the Senate shall, in the Presence of the Senate and House of Representatives, open all the Certificates, and the Votes shall then be counted. The Person having the greatest Number of Votes shall be the President, if such Number be a Majority of the whole Number of Electors appointed; and if there be more than one who have such Majority, and have an equal Number of Votes, then the House of Representatives shall immediately choose by Ballot one of them for President; and if no Person have a Majority, then from the five highest on the List the said House shall in like Manner choose the

QUESTIONS

1. What is meant by the executive power? 2. What is the President's term of office? 3. Can you give any good reasons for or against making his term longer? 4. How may Electors be chosen? 5. How are they chosen to-day? 6. How do the Electors choose a President? 7. Do you think Electors should be free to choose any one they desire for President? 8. Give reason for your answer. 9. The method of voting for President and Vice President was changed by the XII amendment. Why?

President. But in choosing the President, the Votes shall be taken by States, the Representation from each State having one Vote; A quorum for this Purpose shall consist of a Member or Members from two thirds of the States, and a Majority of all the States shall be necessary to a Choice. In every Case, after the Choice of the President, the Person having the greatest Number of Votes of the Electors shall be the Vice President. But if there should remain two or more who have equal Votes, the Senate shall choose from them by Ballot the Vice President.

The Congress may determine the Time of choosing the Electors, and the Day on which they shall give their Votes; which Day shall be the same throughout the United States.

No Person except a natural born Citizen, or a Citizen of the United States, at the time of the Adoption of this Constitution, shall be eligible to the Office of President; neither shall any Person be eligible to that Office who shall not have attained to the Age of thirty five Years, and been fourteen Years a Resident within the United States.

In Case of the Removal of the President from Office, or of his Death, Resignation, or Inability to discharge the Powers and Duties of the said Office, the Same shall devolve on the Vice President, and the Congress may by Law provide for the Case of Removal, Death, Resignation or Inability, both of the President and Vice President, declaring what Officer shall then act as President, and such Officer shall act accordingly, until the Disability be removed, or a President shall be elected.

The President shall, at stated Times, receive for his Services, a Compensation, which shall neither be Increased nor diminished during the Period for which he shall have been elected, and he shall not receive within that Period any other Emolument from the United States, or any of them.

Before he enter on the Execution of his Office, he shall take the following Oath or Affirmation:—

“I do solemnly swear (or affirm) that I will faithfully execute the

QUESTIONS

1. When the House of Representatives chooses a President, how many votes may be cast? 2. If the Electors fail to choose a Vice President, who makes the choice? 3. How is it done? 4. Give a reason why the President's salary should not be increased during his term of office. 5. Give the President's oath. 6. Suppose the President believes his duty urges him to one course of action while the people wish him to do differently, what should he do?

Office of President of the United States, and will to the best of my Ability, preserve, protect, and defend the Constitution of the United States."

SECTION. 2. The President shall be Commander in Chief of the Army and Navy of the United States, and of the Militia of the several States, when called into the actual Service of the United States; he may require the Opinion, in writing, of the principal Officer in each of the executive Departments, upon any Subject relating to the Duties of their respective Offices, and he shall have Power to grant Reprieves and Pardons for Offences against the United States, except in Cases of Impeachment.

He shall have Power, by and with the Advice and Consent of the Senate, to make Treaties, provided two thirds of the Senators present concur; and he shall nominate, and by and with the Advice and Consent of the Senate, shall appoint Ambassadors, other public Ministers and Consuls, Judges of the supreme Court, and all other Officers of the United States, whose Appointments are not herein otherwise provided for, and which shall be established by Law: but the Congress may by Law vest the Appointment of such inferior Officers, as they think proper, in the President alone, in the Courts of Law, or in the Heads of Departments.

The President shall have Power to fill up all Vacancies that may happen during the Recess of the Senate, by granting Commissions which shall expire at the End of their next Session.

SECTION. 3. He shall from time to time give to the Congress Information of the State of the Union, and recommend to their Consideration such Measures as he shall judge necessary and expedient; he may, on extraordinary Occasions, convene both Houses, or either of them, and in Case of Disagreement between them, with Respect to the Time of Adjournment, he may adjourn them to such Time as he shall think proper; he shall receive Ambassadors and other public Ministers; he shall take Care that the Laws be faithfully executed, and shall Commission all the Officers of the United States.

QUESTIONS

1. Who is the Commander in Chief of the Army and Navy?
2. Does he ever take command in the field?
3. Why or why not?
4. How does the President recommend that Congress take any desired action?
5. How did President Wilson change this custom?
6. When may the President adjourn Congress?
7. Why not allow the President to adjourn Congress whenever he sees fit?
8. Have rulers ever abused this power?

SECTION. 4. The President, Vice President and all civil Officers of the United States, shall be removed from Office on Impeachment for, and Conviction of, Treason, Bribery, or other high Crimes and Misdemeanors.

ARTICLE. III.

SECTION. 1. The judicial Power of the United States, shall be vested in one supreme Court, and in such inferior Courts as the Congress may from time to time ordain and establish. The Judges, both of the supreme and inferior Courts, shall hold their Offices during good Behaviour, and shall, at stated Times, receive for their Services, a Compensation, which shall not be diminished during their continuance in Office.

SECTION. 2. The judicial Power shall extend to all Cases, in Law and Equity, arising under this Constitution, the Laws of the United States, and treaties made, or which shall be made, under their Authority;—to all Cases affecting Ambassadors, other public Ministers and Consuls;—to all Cases of admiralty and maritime Jurisdiction;—to Controversies to which the United States shall be a Party;—to Controversies between two or more States;—between a State and Citizens of another State;—between Citizens of different States,—between Citizens of the same State claiming Lands under Grants of different States, and between a State, or the Citizens thereof, and foreign States, Citizens, or Subjects.

In all Cases affecting Ambassadors, other public Ministers and Consuls, and those in which a State shall be Party, the supreme Court shall have original Jurisdiction. In all the other Cases before mentioned the supreme Court shall have appellate Jurisdiction, both as to Law and Fact, with such Exceptions, and under such regulations as the Congress shall make.

The Trial of all Crimes, except in Cases of Impeachment, shall be by Jury; and such Trial shall be held in the State where the said Crimes shall have been committed; but when not committed within any State, the Trial shall be at such Place or Places as the Congress may by Law have directed.

QUESTIONS

1. What is treason? (Look it up in your dictionary.)
2. What is bribery?
3. How long do Judges of the Supreme and Inferior Courts hold office?
4. What reasons for and against this rule can you suggest?
5. Suggest some cases at law which come under the Supreme Court.
6. What is meant by trial Jury?
7. Can you give arguments for and against Jury trial?

SECTION. 3. Treason against the United States, shall consist only in levying War against them, or in adhering to their Enemies, giving them Aid and Comfort. No Person shall be convicted of Treason unless on the Testimony of two Witnesses to the same overt Act, or on Confession in open Court.

The Congress shall have Power to declare the Punishment of Treason, but no Attainder of Treason shall work Corruption of Blood, or Forfeiture except during the Life of the Person attainted.

ARTICLE. IV.

SECTION. 1. Full Faith and Credit shall be given in each State to the public Acts, Records, and judicial Proceedings of every other State. And the Congress may by general Laws prescribe the Manner in which such Acts, Records and Proceedings shall be proved, and the effect thereof.

SECTION. 2. The Citizens of each State shall be entitled to all Privileges and Immunities of Citizens in the several States.

A Person charged in any State with Treason, Felony, or other Crime, who shall flee from Justice, and be found in another State, shall on Demand of the executive Authority of the State from which he fled, be delivered up, to be removed to the State having Jurisdiction of the Crime.

No Person held to Service or Labour in one State, under the Laws thereof, escaping into another, shall, in Consequence of any Law or Regulation therein, be discharged from such Service or Labour, but shall be delivered up on Claim of the Party to whom such Service or Labour may be due.

SECTION. 3. New States may be admitted by the Congress into this Union ; but no new State shall be formed or erected within the Jurisdiction of any other State ; nor any State be formed by the Junction of two or more States, or Parts of States, without the Consent of the Legislatures of the States concerned as well as of the Congress.

QUESTIONS

1. What constitutes treason in our country? 2. Why should there be *two* witnesses in order to convict of treason? 3. If a criminal flees from one state to another, is he then safe? 4. Could Texas divide up into several states if her people desired? 5. What advantage and disadvantages could you suggest that would come to the people of Texas by dividing their state?

The Congress shall have Power to dispose of and make all needful Rules and Regulations respecting the Territory or other Property belonging to the United States; and nothing in this Constitution shall be so construed as to Prejudice any Claims of the United States, or of any particular State.

SECTION. 4. The United States shall guarantee to every State in this Union a Republican Form of Government, and shall protect each of them against Invasion; and on Application of the Legislature, or of the Executive (when the Legislature cannot be convened) against domestic Violence.

ARTICLE. V.

The Congress, whenever two thirds of both Houses shall deem it necessary, shall propose Amendments to this Constitution, or, on the Application of the Legislatures of two thirds of the several States, shall call a Convention for proposing Amendments, which, in either case, shall be valid to all Intents and Purposes as part of this Constitution, when ratified by the Legislatures of three fourths of the several States, or by Conventions in three fourths thereof, as the one or the other Mode of Ratification may be proposed by the Congress; Provided that no Amendment which may be made prior to the Year one thousand eight hundred and eight shall in any Manner affect the first and fourth Clauses in the Ninth Section of the first Article; and that no State, without its Consent, shall be deprived of its equal Suffrage in the Senate.

ARTICLE. VI.

All Debts contracted and Engagements entered into, before the Adoption of this Constitution, shall be as valid against the United States under this Constitution, as under the Confederation.

This Constitution, and the Laws of the United States which shall be made in Pursuance thereof; and all Treaties made, or which shall be made, under the Authority of the United States, shall be the supreme Law of the land; and the Judges in every State shall be bound thereby, any thing in the Constitution or laws of any State to the Contrary notwithstanding.

QUESTIONS

1. When might the President send troops to a state to be used there?
2. When a state needs United States troops to suppress disorder, how does it proceed?
3. Can you give an instance when a state called for help?
4. How may the Constitution be amended?
5. How many amendments have been made?

The Senators and Representatives before mentioned, and the Members of the several State Legislatures, and all executive and judicial Officers, both of the United States and of the several States, shall be bound by Oath or Affirmation, to support this Constitution; but no religious Test shall ever be required as a Qualification to any Office or public Trust under the United States.

ARTICLE. VII.

The Ratification of the Conventions of nine States, shall be sufficient for the Establishment of this Constitution between the States so ratifying the Same.

THE AMENDMENTS

I

Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof; or abridging the freedom of speech, or of the press; or the right of the people peaceably to assemble, and to petition the Government for a redress of grievances.

II

A well-regulated Militia, being necessary to the security of a free State, the right of the people to keep and bear Arms, shall not be infringed.

III

No Soldier shall, in time of peace be quartered in any house, without the consent of the Owner, nor in time of war, but in a manner to be prescribed by law.

IV

The right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated, and no Warrants shall issue, but upon probable cause, supported by Oath or affirmation, and particularly describing the place to be searched, and the persons or things to be seized.

QUESTIONS

1. Can Congress recognize any religion as the established one? 2. What can you say for or against this law? 3. What is meant by freedom of speech? 4. By freedom of the press? 5. Do these mean that any one can say or print malicious falsehood about other people and not be liable to punishment? 6. Do you know any reason for inserting the provision against quartering troops in a house? 7. Under what condition have officers a right to search a home?

V

No person shall be held to answer for a capital, or otherwise infamous crime, unless on a presentment or indictment of a Grand Jury, except in cases arising in the land or naval forces, or in the Militia, when in actual service in time of War or public danger; nor shall any person be subject for the same offence to be twice put in jeopardy of life or limb; nor shall be compelled in any Criminal Case to be witness against himself, nor be deprived of life, liberty, or property, without due process of law; nor shall private property be taken for public use, without just compensation.

VI

In all criminal prosecutions, the accused shall enjoy the right to a speedy and public trial, by an impartial jury of the State and district wherein the crime shall have been committed, which district shall have been previously ascertained by law, and to be informed of the nature and cause of the accusation; to be confronted with the witnesses against him; to have compulsory process for obtaining Witnesses in his favor, and to have the Assistance of Counsel for his defence.

VII

In suits at common law, where the value in controversy shall exceed twenty dollars, the right of trial by jury shall be preserved, and no fact tried by a jury shall be otherwise re-examined in any Court of the United States, than according to the rules of the common law.

VIII

Excessive bail shall not be required, nor excessive fines imposed, nor cruel and unusual punishments inflicted.

QUESTIONS

1. If a citizen has been once tried for an alleged offense and acquitted, can he be tried again for the same offense? 2. When and under what conditions may the government seize private property? 3. Why should accused people have a speedy trial? 4. When may a citizen demand a jury trial in common law? 5. Would you rather trust your case to a good judge or to the average jury? 6. Must all jurors agree before the decision is rendered? 7. What could you say in favor of allowing a three-fourths majority of a jury to render a decision? 8. What is meant by bail?

IX

The enumeration in the Constitution, of certain rights, shall not be construed to deny or disparage others retained by the people.

X

The powers not delegated to the United States by the Constitution nor prohibited by it to the States, are reserved to the States respectively, or to the people.

XI

The Judicial power of the United States shall not be construed to extend to any suit in law or equity, commenced or prosecuted against one of the United States by Citizens of another State, or by Citizens or Subjects of any Foreign State.

XII

The Electors shall meet in their respective States, and vote by ballot for President and Vice President, one of whom, at least, shall not be an inhabitant of the same State with themselves; they shall name in their ballots the person voted for as President, and in distinct ballots the person voted for as Vice President, and they shall make distinct lists of all persons voted for as President, and of all persons voted for as Vice President, and of the number of votes for each, which lists they shall sign and certify, and transmit sealed to the seat of the government of the United States, directed to the President of the Senate; — The President of the Senate shall, in the presence of the Senate and House of Representatives, open all the certificates and the votes shall then be counted; — The person having the greatest number of votes for President, shall be the President, if such number be a majority of the whole number of Electors appointed; and if no person have such

QUESTIONS

1. To whom do the powers not mentioned in the Constitution belong?
2. Why was it thought best to vote for President and Vice President in distinct ballots?
3. Tell how the votes are counted.
4. What is meant by a majority of votes?
5. By plurality?
6. Are our officers of city, county, and state chosen by majority or plurality vote?
7. What can you say in favor of or in opposition to this?
8. If the electors fail to elect, what then happens?

majority, then from the persons having the highest numbers not exceeding three on the list of those voted for as President, the House of Representatives shall choose immediately, by ballot, the President. But in choosing the President, the votes shall be taken by States, the representation from each State having one vote; a quorum for this purpose shall consist of a member or members from two-thirds of the States, and a majority of all the States shall be necessary to a choice. And if the House of Representatives shall not choose a President whenever the right of choice shall devolve upon them, before the fourth day of March next following, then the Vice President shall act as President, as in the case of the death or other constitutional disability of the President. The person having the greatest number of votes as Vice President, shall be the Vice President, if such number be a majority of the whole number of Electors appointed, and if no person have a majority, then from the two highest numbers on the list, the Senate shall choose the Vice President; a quorum for the purpose shall consist of two-thirds of the whole number of Senators, and a majority of the whole number shall be necessary to a choice. But no person constitutionally ineligible to the office of President shall be eligible to that of Vice President of the United States.

XIII

SECTION 1. Neither slavery nor involuntary servitude, except as a punishment for crime whereof the party shall have been duly convicted, shall exist within the United States, or any place subject to their jurisdiction.

SECTION 2. Congress shall have power to enforce this article by appropriate legislation.

XIV

SECTION 1. All persons born or naturalized in the United States, and subject to the jurisdiction thereof, are citizens of the United States and

QUESTIONS

1. What happens if both the Electors and the House of Representatives fail to elect a President before the fourth day of March following the November election?
2. What war was fought to secure the XIII amendment?
3. Under what conditions do we now have involuntary servitude?
4. Who are citizens of the United States?
5. How may a foreigner be naturalized?
6. Do you think the time required for naturalization too long or too short?

of the State wherein they reside. No State shall make or enforce any law which shall abridge the privileges or immunities of citizens of the United States: nor shall any State deprive any person of life, liberty, or property, without due process of law; nor deny to any person within its jurisdiction the equal protection of the laws.

SECTION 2. Representatives shall be apportioned among the several States according to their respective numbers, counting the whole number of persons in each State, excluding Indians not taxed. But when the right to vote at any election for the choice of electors for President and Vice President of the United States, Representatives in Congress, the Executive and Judicial officers of a State, or the members of the Legislature thereof, is denied to any of the male inhabitants of such State, being twenty-one years of age, and citizens of the United States, or in any way abridged, except for participation in rebellion, or other crime, the basis of representation therein shall be reduced in the proportion which the number of such male citizens shall bear to the whole number of male citizens twenty-one years of age in such State.

SECTION 3. No person shall be a Senator or Representative in Congress, or elector of President and Vice President, or hold any office, civil or military, under the United States, or under any State, who, having previously taken an oath, as a member of Congress, or as an officer of the United States, or as a member of any State legislature, or as an executive or judicial officer of any State, to support the Constitution of the United States, shall have engaged in insurrection or rebellion against the same, or given aid or comfort to the enemies thereof. But Congress may by a vote of two-thirds of each House, remove such disability.

SECTION 4. The validity of the public debt of the United States, authorized by law, including debts incurred for payment of pensions and bounties for services in suppressing insurrection or rebellion, shall not be questioned. But neither the United States nor any State shall assume or pay any debt or obligation incurred in aid of insurrection or

QUESTIONS

1. Under what conditions may a citizen be deprived of life, liberty, or property?
2. How are Representatives to be apportioned according to the XIV amendment?
3. What is said here about officers of the United States who afterward engaged in rebellion?
4. How may Congress remove this disability?
5. What punishment was given to the leaders of the Rebellion?
6. Why was the punishment made light?
7. Do you think this was the best course?

rebellion against the United States, or any claim for the loss or emancipation of any slave; but all such debts, obligations and claims shall be held illegal and void.

SECTION 5. The Congress shall have power to enforce, by appropriate legislation, the provisions of this article.

XV

SECTION 1. The right of citizens of the United States to vote shall not be denied or abridged by the United States or by any State on account of race, color, or previous condition of servitude.

SECTION 2. The Congress shall have power to enforce this article by appropriate legislation.

XVI

The Congress shall have power to lay and collect taxes on incomes, from whatever source derived, without apportionment among the several States, and without regard to any census or enumeration.

XVII

The Senate of the United States shall be composed of two Senators from each State, elected by the people thereof, for six years; and each Senator shall have one vote. The electors in each State shall have the qualifications requisite for electors of the most numerous branch of the State legislature.

When vacancies happen in the representation of any State in the Senate, the executive authority of each State shall issue writs of election to fill such vacancies: PROVIDED that the legislature of any State may empower the executive thereof to make temporary appointments until the people fill the vacancies by election as the legislature may direct.

This amendment shall not be so construed as to affect the election or term of any Senator chosen before it becomes valid as part of the Constitution.

QUESTIONS

1. Has the Confederate war debt ever been paid?
2. Why was this provision put in the Constitution by amendment?
3. May a person be deprived of the right to vote on account of race or color?
4. Can a state deprive a citizen of his right to vote on account of inability to read and write?
5. What would you think of such a law?
6. Give the meaning of the XVI and XVII amendments.
7. What change is made in the election of Senators?

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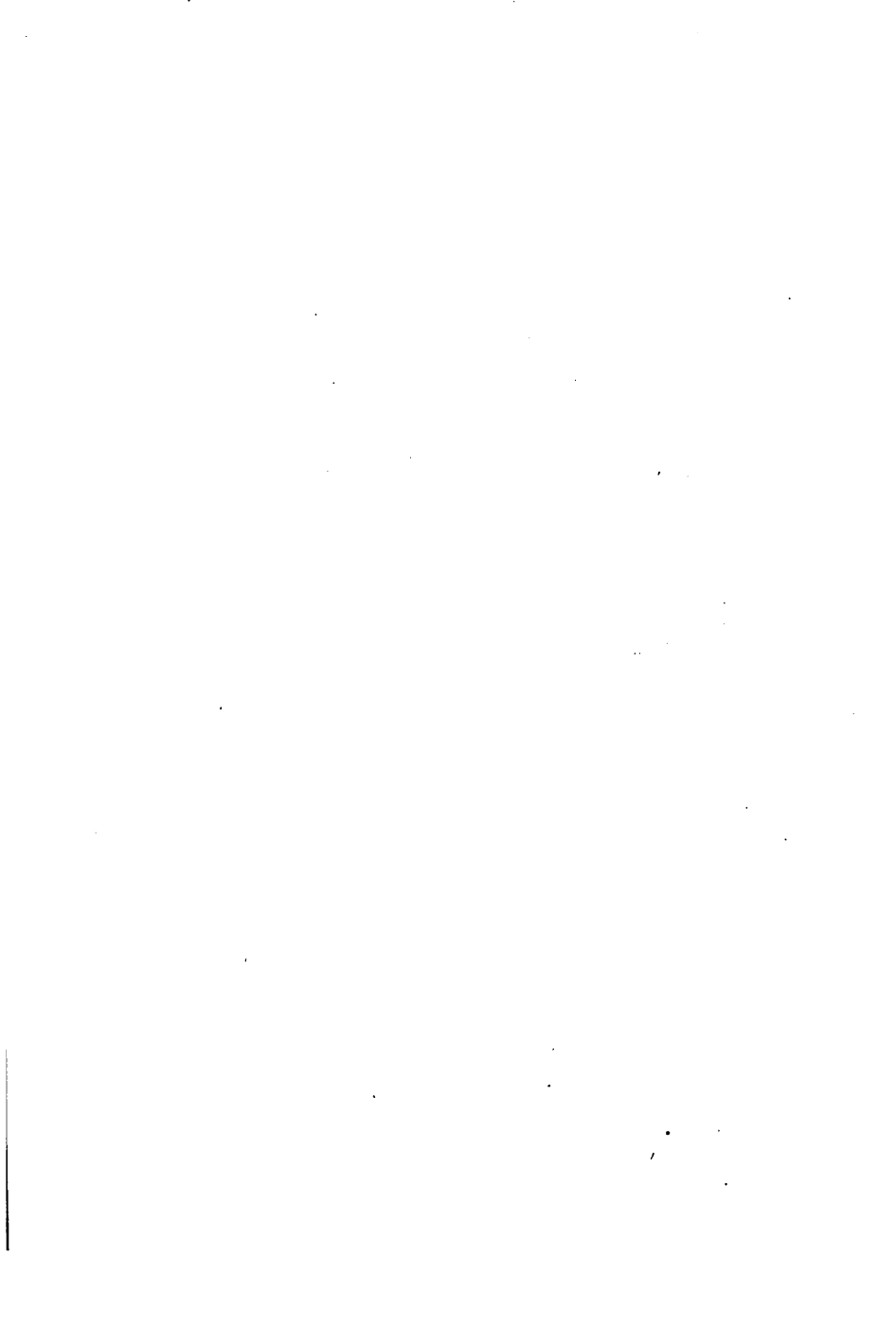
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